SWAZILAND.

The Swaziland development plan, 1960/64.

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THE SWAZILAND DEVELOPMENT PLAN 1960/64.

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It is usual to begin reports on Swaziland, by saying that it is a country the size of Wales with an area of 6,705 square miles and a population of ..... followed by a historical and geographical dissertation on the Territory. This opening, sanctified though it is by pitiless repetition has now been overworked and might be quietly dropped. If by some chance the reader does not know the basic facts about Swaziland, he is referred to the latest Annual Report.

2. Swaziland has had effective assistance from the Colonial Development and Welfare Fund since 1940 and now, at the beginning of a new development period twenty years later, it seems appropriate to pause for a moment to consider whether development in Swaziland has been planned in accordance with well-tried principles, and if so with what results?

3. In order to promote economic development in a backward country it is necessary:-

(i) to produce an exportable surplus of cash crops,

(ii) to improve agricultural methods so that labour can be released for industry,

(iii) to process local resources in local industrial undertakings,

(iv) to provide an "infra-structure" of housing, communications, electric power, water supplies and technical training.

4. In order to promote social development, health services and education in all its forms are required. These services are expensive; they do not give an immediate or even direct cash return and so have to be paid for out of the income derived from economic development.

Could these principles be applied to the needs of the Swaziland of 1940 ?

5. In that year the Territory had a revenue of £101,300. Its economy was unimpressive. The road and telecommunications systems were primitive, the standard of the social services was low, the soil, particularly on the land under African occupation, was being increasingly eroded because of over-stocking and primitive agricultural practices and very little was known about the Territory's mineral resources. In fact it was a text-book example of an underdeveloped country.

6. It was into this setting that the United Kingdom Government dropped the first large instalment of C.D. and W. finance. This was followed in later years by further doles until by 1960 Swaziland had received a total of £2,500,436 plus £1,768,611 by way of loan.

7. This money has been spent under the following heads:-

	C.D. & W. Fund.	Loan.
Land Utilization	£749,093	-
Education	401,898	-
Medical Services	281,723	-
Public Works (mainly housing and communications)	886,478	1,664,076
Geological Surveys	155,262	-
Topographical Surveys	25,982	-
Telecommunications	-	104,535
	£2,500,436	£1,768,611

This broadly satisfies the criteria set out in paragraphs 3 and 4. How has it all worked out in practice?

8. This is a difficult question to answer in the absence of reliable statistics but the following comparisons are of some significance:-

	1940.	1960.
Public Finances.		
Revenue	£101,300	£1,449,074
Expenditure	£166,500	£1,613,300
Bank Deposits.	£68,000	£1,051,000

	1940.	1960.
Education.		
African Primary.		
No of Schools	219	286
No. of Pupils	8,263	31,217
European Primary.		
No. of Schools	10	11
No. of Pupils	377	1,100
Medical.		
Hospitals.		
No. of Beds	135	611
No of In-Patients	3,642	16,145
No. of Out-Patients	22,965	124,285

Malaria: There was an epidemic as late as 1946 with 50,000 cases. In 1959 only 165 positive cases were recorded. Of these 135 were immigrant labourers.

Road Maintenance.	£17,000	£90,000
Mineral Production.		
Asbestos - tons	20,804	24,805
value	£436,756	£2,085,353
Merchandise.		
Imported.	£110,000	£700,000
Posts and Telegraphs.		
No of Telephones	100	2,264
Revenue	£2,600	£37,000
Agriculture.		
Butter	336,000 lbs.	595,000 lbs.
No. of Dairies	93	134
Tobacco Production:		
European	384,000 lbs.	632,000 lbs.
African	40,000 lbs.	443,000 lbs.
Fertilizers		
Sold to Africans	5½ tons	766 tons
Cotton Production	40 tons	4,936 tons.

9. All these facts indicate that the development programmes of the past 20 years, drawn up in accordance with acceptable principles, have had on the whole a beneficial effect on the lives of all the inhabitants of the Territory.

The Development Plan for 1960/64.

10. Any development plan must be conceived on the basis of funds available to implement it. The difficulty is to see in advance just what funds are available. Inevitably certain assumptions must be made. In putting together the Swaziland development plan for 1960/64 we have assumed:-

(a) that the Territory's revenue for the period 1960/64 will be £7,292,011. This figure although based on trends, possibilities and even intuition, is in the end no more than an informed guess, but we cannot do better;

(b) that the C.D. and W. allocation for the period 1960/64 will be £2 millions, of which £800,000 has already been hypothecated for road construction. It is also hoped that some assistance will be obtained, as hitherto, from a C.D. and W. Research allocation;

(c) that loans amounting to £3,000,000 will be made available over the period 1960/64 (this would include about £500,000 for the 1959/60 loan expenditure which has been charged to advances.) The loans required for development during 1960/64 are therefore £2,500,670.

(d) that free grants, as recommended by the Economic Survey Mission, will be made available, viz:-

(i)	Roads	£1,836,000
(ii)	Housing and Public Buildings	£550,000
(iii)	Agricultural Loans	£50,000
(iv)	Cottage Industries	£5,000
		£2,441,000

(e) that funds will be made available to finance other recommendations of the Economic Survey Mission as follows:-

(i)	Agriculture	£223,980
(ii)	Education	£80,712
		£304,692

11. The plan for the years 1960-64 will be financed in two ways:-

(i) by purely territorial revenue:

(ii) by C.D. & W. funds, loans and, if approved, by free grants.

It is convenient to consider the territorial plan in two parts in accordance with the method of financing.

(i) Territorial Revenue and Expenditure for the years 1960-64.

12. Forecasts of territorial revenue and expenditure for the period 1960-64 are given on pages 14 and 15. The picture is as follows:-

	1960/61. (Draft Estimates).	1961/62	1962/63.	1963/64.	Total.
Revenue	1,473,311	1,844,000	1,922,500	2,052,200	7,292,011
Expenditure	1,729,395	2,013,154	2,202,071	2,419,135	8,363,755
Deficit	256,084	169,154	279,571	366,935	1,071,744

13. The general revenue balance at 31st March, 1960 is estimated at £430,000. This is likely to be reduced to £173,000 by the end of 1960/61, and will be almost completely liquidated by the end of 1961/62, leaving approximately £646,000 to be found to fill the gap between revenue and expenditure during the last two years of the development period.

14. It is notoriously difficult to make an accurate prediction of revenue and expenditure trends for a number of years ahead, the more so in view of the many imponderables in the future economic development of the Territory. On the other hand the forecast has been based on the latest information available and probably indicates correctly the basic budgetary fact that revenue will not overtake expenditure during the period 1960/64. Just how soon this will occur is impossible to say, because of the numerous unknown quantities involved, especially on the revenue side. To take but one example, The tax yield from possible iron ore exploitation will depend on, among other things, the rate of exploitation, the cost of production, the market price, and the period of amortisation, and on the basis of present information

could vary between £40,000 and £140,000 per annum. Possible revenue from coal mining, railway development and improved agricultural productivity is even more difficult to assess. All that can be said is that the economic prospects of Swaziland are bright, but that assistance will be required for some years to ease the growing pains of the Territory. The alternative is to prune expenditure drastically on social and economic services which all agree are vital to the economic and political development of Swaziland.

Revenue.

15. The difficulty of assessing the tax value of new development projects has already been mentioned. It is, however, almost as difficult to predict future yields from existing tax sources. The two largest revenue items are Income Tax and Customs and Excise. Approximately half the total yield of Income Tax still comes from asbestos production, and fluctuations in output can seriously affect the overall revenue position, as they have done on several occasions in the past. As regards Customs and Excise it is extremely difficult to forecast revenue when there is no local administration and all duties are determined by the Union. Revenue estimates are therefore for the most part projections of existing rates of growth, with the addition of new sources where these can be foreseen.

16. In the following paragraphs the major revenue sources are discussed.

Customs and Excise.

17. Revenue under this head has increased substantially in recent years though it is a moot point whether this improvement is essentially a reflection of Swaziland or Union prosperity. The figures for the past six years are as follows:-

1954/55	1955/56	1956/57	1957/58	1958/59	1959/60
£105,000	£122,000	£135,000	£146,000	£175,000	£214,000 (estimated)

The large increases in the last three years have been partly the result of higher duties, and it should not be assumed that this can be maintained. It seems nevertheless reasonable to expect a steady improvement in revenue from this source, and an annual increase of approximately

£20,000 has been assumed.

Electricity Supplies.

18. Just over £100,000 has been spent since 1955 in purchasing the Bremersdorp electricity undertaking and in expanding generation and distribution at Mbabane and Bremersdorp. This investment is already bearing fruit and will produce progressively higher revenues during the next few years. Part of this increase will however, be offset by the high cost of diesel generation.

Income Tax.

19. This is by far the largest single source of revenue (approximately 50% of the total). The breakdown of the annual estimates is as follows:-

	1959/60	1960/61	1961/62	1962/63	1963/64
Mining	485,000	485,000	500,000	510,000	520,000
Sugar	+	65,000	270,000	256,000	256,000
Pulp	+	5,000	73,000	133,000	133,000
Other Sources	135,000	125,000	137,000	116,000	131,000
Investigator	-	20,000	20,000	10,000	10,000
	620,000	700,000	1,000,000	1,025,000	1,050,000

+ Tax from contractors for Sugar and Pulp included under Other Sources.

The production year for asbestos on which 1960/61 tax is payable ends on 31st March, 1960, and it is already known that the tax yield will be about the same level as 1959/60. It is assumed that the world demand for asbestos will improve slightly during the following three years, and a small annual increase is forecast.

20. The estimate of tax from the sugar industry assumes a nett profit on cane growing of £1 per ton, an acreage cane yield of 50 tons per acre, and milling profits of £2.10s. per ton for the existing mill and £4 per ton for the two new mills (at Mhlume and Big Bend). These assumptions have been made on the basis of information obtained from representatives of the sugar industry both in Swaziland and in the Union, but how accurate they are will not be known until the industry is in full production of its 80,000 ton quota.

21. As regards pulp, probable production costs and market prices are not known, and the estimate has been based on a 10% return on the total capital investment of £11.5 million. The reduction in Other Sources from 1962/63 coincides with the departure of contractors employed by the pulp and sugar industries.

22. Finally, it is expected that the activities of the Income Tax Investigator will uncover substantial amounts of unpaid tax.

23. It is clear that the many assumptions which have had to be made regarding income tax yields must limit the value of the above estimates. This is unfortunate since it is by far the largest source of revenue, but it is simply not possible to be more precise.

Licences.

Revenue over the past six years has increased as follows:-

1954/55	1955/56	1956/57	1957/58	1958/59	1959/60
30,000	33,300	37,000	40,000	45,000	51,500 (estimated)

The principal sources are motor vehicle and trading licences, and it is considered justified to count on a continued expansion of these items. The present rate of increase has therefore been projected until 1963/64.

Native Tax.

24. Native Tax administration has recently been reviewed, and plans for a complete overhaul of the system are now being prepared. It is estimated that this will produce a marked increase in collections, as well as creating the administrative machinery without which it will be impossible to contemplate a more refined tax system for Africans.

Posts and Telegraphs.

25. Loan funds approved up to 31st March, 1960, as a first stage in the development of an efficient telecommunications network amount to approximately £105,000. It is proposed to continue this programme in the period 1960/64 at a cost of £258,000. The revenue which this

investment is expected to produce in the same period is as follows:-

	1960/61	1961/62	1962/63	1963/64
Postal	48,000	55,000	63,000	72,000
Telephones	37,200	51,000	59,000	69,000
Telegraphs	7,450	12,000	13,000	14,500
Stamp Issues etc.	-	12,500	3,000	38,000
	92,650	130,500	138,000	193,500

26. The expected increase may appear to be very high but much of it represents the return on past capital expenditure and the rest takes account of the continuing demand for telephone services which we hope will be largely satisfied before 1964. The item Stamp Issues includes revenue from the overprinting of stamps resulting from decimalization and a new issue in 1963/64.

Expenditure.

27. Increases in the expenditure estimated for the period 1960-64 can be broadly grouped under (a) "annual creep" and (b) the recurrent cost of development expenditure. The latter includes debt service charges, recurrent expenditure on capital projects and contributions to C.D. & W. Schemes. In framing these estimates care has been taken to exclude desirable as distinct from essential items, and they should be regarded, if not as the irreducible core of Territorial expenditure for the next four years, at least as the minimum level which is considered to be consistent with the orderly and sustained development of the Territory.

28. The first category (annual creep) comprises all heads of expenditure except Public Debt. The estimates for these heads provide for no more than the maintenance of the present level of services and administration. No further comment on the above heads is necessary therefore, except perhaps to note that there is a constant pressure to improve services and administration which for political or other considerations it is not always possible to resist. The estimates given may therefore be, if anything, on the low side.

29. The second category contains the following heads, which, with the exception of Public Debt, are also increased by annual creep (see above).

Public Debt.
Education.
Geological Survey.
Land Utilization.
Medical.
Police.
Posts and Telegraphs.
Prisons.

The following is an explanation of increases under these heads.

Public Debt.

30. Interest and redemption payment on existing loans will be as follows:-

1960/61	1961/62	1962/63	1963/64
83,162	83,100	81,930	80,805

During the period 1960-64 it is proposed to raise new loans totalling £2,000,000 -

(a) an Exchequer loan of £500,000 early in 1960/61 to cover the 1959/60 loan programme, and

(b) an open market loan of £1,500,000 raised in three equal instalments, in late 1960/61, late 1961/62 and late 1962/63.

The terms assumed are:-

Exchequer Loan: Interest 5½%, repayment by equal annual instalments of principal and interest combined to extinguish the loan in 20 years.

Open Market Loans: Interest at 5½% payable halfyearly, and redemption over 20 years by sinking fund with interest at 4½%.

No moratorium has been assumed for either loan.

The cost of servicing these loans will be:

1960/61	1961/62	1962/63	1963/64
-	£87,160	£131,567	£177,120

31. In addition it is proposed to raise a loan of £1,000,000 for a territorial electricity scheme. As this would be a self servicing loan, redemption and

interest figures do not appear in these estimates.

Education.

32. The increase in expenditure, from £284,000 in 1960/61 to £368,000 in 1963/64 is related solely to the annual increase in the cost of existing services and to the additional staff, books and classroom equipment required for the new educational facilities included in the C.D. & W. element of the Plan. The estimates have had to be prepared in advance of the publication of the Rusbridger Report, and will undoubtedly have to be substantially increased on this account.

33. The level of education services envisaged during the next four years cannot be described as lavish, and, high though the immediate cost may be, it cannot be seriously disputed that it is essential, both on political and on economic grounds, and will more than justify itself in the years ahead.

Geological Survey and Mines.

34. The entire cost of this department is a charge on territorial revenues from 1st April, 1960. The only new item deserving mention is the proposed purchase of a third drilling rig in 1961-62 and the subsequent increase in operating expenses. The department is performing a very valuable function in locating and prospecting possible new sources of mineral wealth, and the third drill and ancillary equipment (capital £5,000 recurrent £5,000 per annum) will help to speed up this work. It is also probable that it will earn about £2,000 per annum in hire charges.

Land Utilization.

35. Territorial expenditure on this large department will increase by only £70,000 between 1960 and 1964, the reason being that virtually all new projects have been included in the C.D. & W. element of the Plan. Provision has been made for local contributions towards the cost of these projects (on the usual tapering basis), and these will total £122,036. The need for a considerably expanded programme of research and field services has been fully argued elsewhere in the Plan and need not be

repeated here. Suffice it to say that in the rapid improvement of agricultural productivity, especially in the Swazi areas, lies one of the main hopes for the economic, and political, development of the Territory.

Medical.

36. The increase in expenditure over the period 1960-64 is only £57,000, and is confined to the additional staff and equipment needed for the hospital extensions at Mbabane and Piggs Peak, for which provision has been made in the C.D & W. element of the Plan, and for the local contribution towards the cost of the Tuberculosis Control Scheme. Although the present level of medical services cannot be regarded as other than minimal, financial considerations make it impossible to contemplate any other departmental expansion.

Police.

37. A relatively large increase in expenditure is proposed for this department (£61,000 over the four-year period). The recommendations of the Deputy Inspector General of Colonial Police, made in 1954, have not yet been fully implemented because of lack of funds. Since then numerous new commitments have arisen, and it would be unwise to defer still further the expansion which is needed to ensure an adequate level of police services.

Posts and Telegraphs.

38. The estimates show a substantial increase, from £84,000 in 1960-61 to £116,000 in 1963-64. These increases are related to the programme of capital expenditure, totalling £238,000, which it is proposed to undertake from loan sources. The high revenue return from this type of investment has been referred to in the Revenue section - revenue is expected to rise from £92,650 in 1960-61 to £193,000 in 1963-64 - and fully justifies the additional expenditure proposed.

Prisons.

29. Provision has been made for a modest increase in staff and other recurrent costs of prisons administration. This will cover the small programme of

capital expenditure on new prison buildings, but is largely designed to improve the very inadequate staffing position which has persisted for a number of years, and which is making it increasingly difficult to maintain an adequate level of administration.

40. The tables on the following two pages contain the estimates of territorial revenue and expenditure for 1960-64:-

ESTIMATES OF TERRITORIAL REVENUE 1960-64.

Head	1960/61	1961/62	1962/63	1963/64	TOTAL
	£	£	£	£	£
1. Cattle Dipping Charges	900	900	900	900	3,600
2. Concession and Mining Rents	2,000	2,000	2,000	2,000	8,000
3. Customs and Excise	230,300	250,000	270,000	290,000	1,040,300
4. Dog Tax	4,400	4,400	4,400	4,400	17,600
5. Electricity Supplies	34,000	39,000	44,000	49,000	166,000
6. Fees for Services Rendered	71,320	76,000	80,000	84,000	311,320
7. Income Tax	700,000	1,000,000	1,025,000	1,050,000	3,775,000
8. Interest	10,000	10,000	10,000	10,000	40,000
9. Judicial Fines	11,000	13,000	13,000	14,000	51,000
10. Leases Quitrents etc.	1,200	1,200	1,200	1,200	4,800
11. Licences	57,010	63,000	67,000	73,000	260,010
12. Mineral Concession Tax*	2,750	2,700	2,200	1,900	9,550
13. Mineral Tax	39,000	38,000	40,000	42,000	159,000
14. Miscellaneous	40,981	35,000	37,000	39,000	151,981
15. Native Tax	70,000	75,000	77,000	79,000	301,000
16. Pass Fees	800	800	800	800	3,200
17. Poll Tax	6,500	7,500	8,000	8,500	30,500
18. Posts and Telegraphs	92,650	130,500	138,000	193,500	554,650
19. Rent from Government Property	26,000	29,000	32,000	35,000	122,000
20. Stamp Duties	30,000	25,000	27,000	29,000	111,000
21. Transfer Duty	35,000	37,000	39,000	41,000	152,000
22. Sale of Crown Land	7,500	4,000	4,000	4,000	19,500
	1,473,311	1,844,000	1,922,500	2,052,200	7,292,011

* Decrease anticipated because of surrender of mineral concession to Government.

ESTIMATE OF TERRITORIAL EXPENDITURE 1960-64.

Head	1960/61	1961/62	1962/63	1963/64	TOTAL
	£	£	£	£	£
Public Debt	83,162	170,260	213,497	257,925	724,844
Central Administration	166,001	176,000	186,000	196,000	724,001
Audit	8,480	8,800	9,100	9,400	35,780
District Administration	50,257	55,000	60,000	65,000	230,257
Education	283,665	317,000	343,000	368,000	1,311,665
Geological Survey	34,390	47,000	43,000	43,000	167,390
Judicial	15,786	17,000	18,000	19,000	69,786
Land Utilization	221,786	253,000	276,000	292,000	1,042,786
Medical	155,984	165,000	175,000	213,000	708,984
Pensions	55,000	60,000	64,000	60,000	239,000
Police	121,158	150,094	162,474	182,810	616,536
Posts and Telegraphs	84,438	96,000	106,000	116,000	402,438
Prisons	37,516	45,000	48,000	50,000	180,516
Public Works Department	258,755	302,000	340,000	382,000	1,292,755
Electricity	30,147	35,000	39,000	44,000	148,147
Public Works Extraordinary	24,000	26,000	26,000	26,000	102,000
Stores	43,837	45,000	46,000	47,000	181,837
Swazi Administration	45,033	45,000	47,000	48,000	185,033
	1,729,395	2,013,154	2,202,071	2,419,135	8,363,755

16/.....

(ii) Development to be financed by grant and loan.

41. The plans which have been drawn up for the expenditure of C.D. & W. allocations, loan finance and free grants follow the same general lines as in the period 1955-60. The reasons for this are not far to seek:-

(a) the objectives of economic and social development in Swaziland have not changed

(b) it is wasteful to spend small amounts of money for short periods on basic projects such as the development of agriculture and education, for in an underdeveloped country they are soon swallowed up with little to show for the expenditure. Lasting results will only be achieved after large sums have been spent over a period of years. Only in this way can a firm foundation for further progress be built. In this context, the much-used term "priming the pump" has little meaning.

42. The following are the services to which development finance will be devoted in 1960/64:-

(i) Land Utilization.
(ii) Education.
(iii) Medical Services.
(iv) Telecommunications.
(v) Public Works.
(vi) Agricultural Loans.
(vii) Cottage industries.

Land Utilization.

43. Agriculture will always be the backbone of the Swaziland economy and it is one of the principal aims of the Administration to promote the increase of agricultural production. Improvements in agriculture require not only men, material and money but also a change of heart and mind which is not so easily come by.

44. The first large scale attack on primitive agricultural practices (by no means confined to the Africans in Swaziland) began in 1949 with the inauguration of the Rural Development programme. The objects of this

(a) to conserve soil and water;
(b) to improve agricultural methods;
(c) to control grazing.

45. The first task in 1949 was the establishment of a small pilot scheme for the establishment of grass filter strips in cultivated land. Severe opposition was at first encountered from a naturally suspicious Swazi peasantry, but this was gradually overcome by the persistence and patience of the extension staff and the co-operation of the Native Authority. So far over 90% of all arable land in the high and middleveld areas has been protected in this way (70,000 miles of strips in 10 years) and the grass strip is now a familiar feature of the landscape. The bushveld, which is of limited agricultural value under present methods of cultivation, is now in need of the same degree of protection. The second major aspect of soil conservation has been the provision of contour furrows meadow strips and storage dams. In the early years of the scheme great efforts were made to encourage the participation of the local population in the soil conservation programme by organising them through their chiefs to provide paid labour for the construction and maintenance of contour furrows. This was only a partial success and was discontinued. The emphasis is now on voluntary assistance to the mechanical units, in return for which storage dams, irrigation channels and so on are provided for those prepared to co-operate. In this way the progressive Swazi are drawn into the conservation system, can see the beneficial results of conservation directly on their own land and serve as an example to their more conservative neighbours.

46. With the success of the grass stripping programme, it has been possible in recent years to concentrate more on improving methods of agriculture. This includes the preparation of the land, the use of good seed, the application of fertilizer and proper cultivation of the growing crops. Progress in this direction has been less spectacular than in the field of soil conservation, but has nevertheless been substantial. In 1949 there were no purchases of fertilizer for resale to the Swazi, which suggests that little if any, fertilizer was used in Swazi agriculture. By 1959 sales of fertilizer,

mainly through Farmers' Associations, had risen to 766 tons. Row planting has progressively replaced traditional methods of broadcasting seed, fencing is becoming a familiar feature of the countryside and even mechanical cultivation has latterly assumed importance.

47. The Swazi is still strongly attached to his cattle. Livestock control has therefore been an important feature of rural development work. Redistribution of stock from heavily overgrazed areas has proved the most urgent task, though attention has also been paid to the longer term aspects of disease control, stock improvement, pasture management and grazing control.

48. The following new schemes are proposed for 1960-64:-

(a) Rural Development and Soil Conservation £215,226.

This scheme is divided into three sections:-

I. Rural Development.
II. Soil Conservation Works.
III. Dam Construction.

I. Rural Development. £71,612.

49. This section includes a variety of activities relevant to the promotion of basic agricultural development. In this way it follows the path of the previous rural development scheme. It is now proposed however to create two planning teams each of two Agricultural Officers to plan African resettlement and land use schemes and advise European farmers on farm planning. The second of these teams was recommended by the Economic Survey Mission who felt that one team was insufficient to meet the pressing problems in this field. Arising out of the Mission's proposals is the need to complete the aerial survey of the Territory. The cost of the Economic Survey Mission's recommendations will be £32,916.

II. Soil Conservation Works. £73,345.

50. Soil conservation is a never-ending task. The grass-stripping campaign started in 1949 is now borne by local funds, but more radical measures are required. It is now proposed to increase the three existing conservation units to five. Each unit consists of two caterpillar tractors, two graders and one water cart

with the necessary staff.

III. Dam Construction. £70,269.

51. Livestock is increasing in all areas where water supplies are freely available but the pressure on grazing is such that urgent action must be taken to redistribute stock to other less hardpressed grazing grounds. There are enough understocked areas to accommodate surplus livestock from other districts but this cannot be done until adequate water supplies are provided. It is therefore proposed to establish a second dam building unit so that stock redistribution may proceed faster than in the past.

(b) Agricultural Education and Extension. £109,713.

52. This scheme is also divided into three sections:-

I. Field Services.
II. Land Utilization Officers' Training School.
III. Experimental Farm, Goedgegun.

I. Field Services. £97,748.

53. The object of this scheme is to improve agricultural practices. This is one of the most important functions of the Land Utilization Department for on it depends the ultimate prosperity of the country. The Economic Survey Mission recognised this and proposed additions to the original scheme to establish field services for irrigation farming. These proposals will cost a further £29,616.

II. Land Utilization Officers' Training School. £9,865.

54. The present School was opened in 1957 and is now ready for expansion. These officers are key men in all agricultural schemes for they have the closest contact with the Swazi. It is important to have well-trained men for the important task of putting across the new agricultural methods to the people. It is now proposed to begin a two-year course for suitably qualified men.

The expansion of the school is also linked with plans for a more systematic approach to community development, as recommended in the Moffet Report. No

decision has as yet been taken, however, on the extent or the scope of the community development programme, and it is not proposed to defer the expansion of the school on this account.

III. Experimental Farm - Goedgegun. £2,100.

55. In its social, economic and agricultural problems, the Goedgegun area is different from other parts of Swaziland and under the 1955 Act a small experimental farm was established to study local agricultural problems. It has now been decided that a demonstration mixed farming unit should be created. The cost will be £6,100 of which £4,000 will be refunded in respect of sale of stock and produce.

(c) Grazing and Livestock Control. £187,137.

56. In the past this scheme has been concerned mainly with stock redistribution and proposals costing £25,689 for the period 1960-64 were prepared.

57. The Economic Survey Mission however recommended a considerable expansion of this scheme to improve animal husbandry and to purchase further holding grounds for stock from overgrazed areas. This project will be closely associated with the dam construction in another scheme.

(d) Agricultural Research. £187,224.

58. The Economic Survey Mission strongly emphasised the importance of agricultural research in Swaziland. They recommended the establishment of new research stations and the expansion of those now in existence. Original plans have therefore been revised. It is hoped that funds will be obtained from the Central C.D. & W. Fund.

(e) Botanical Survey. £7,782.

59. The botanical survey of Swaziland was begun in 1956 by Professor R.H. Compton, Emeritus Professor of Botany at Cape Town University. It is proposed to continue the valuable work which has already been done.

(f) Sociological Survey. £5,043.

60. An application has already been submitted to complete the social research project now being financed from Central (Research) C.D. & W. funds as Scheme R.661. One project will end in December, 1961, and the additional amount required is £5,043, of which £905 will be met from local funds.

61. The phasing of the above schemes would be as follows:-

Land Utilization - Development Plan 1960-64.

	1960/61	1961/62	1962/63	1963/64	TOTAL
Rural Development	56,238	42,381	60,095	23,596	182,310
Economic Survey Mission	16,636	2,746	3,612	9,922	32,916
Agricultural Education	30,433	15,264	18,421	15,979	80,097
Economic Survey Mission	16,572	3,986	4,796	4,262	29,616
Livestock Control	10,680	4,808	5,205	4,996	25,689
Economic Survey Mission	31,895	9,928	12,110	13,523	67,456
Economic Survey Mission	84,344	3,180	3,216	3,252	93,992
Botanical Survey	2,294	1,812	1,830	1,846	7,782
Sociological Survey	2,420	2,623	-	-	5,043
Agricultural Research	70,193	47,344	37,123	32,564	187,224
	321,705	134,072	146,408	109,940	712,125
Less: Local Contributions	9,703	20,147	38,091	51,543	119,484
	£312,002	113,925	108,317	58,397	592,641

Medical Services.

62. Medical services in Swaziland are provided by the Medical Department with four hospitals and by Missions with three hospitals. There are also numerous clinics scattered about the Territory to provide for the simple medical needs of the country districts. These are run by Government, the Missions and the Swazi Nation.

63. During the period 1955-60 C.D. and W. grants totalling £85,000 were provided for medical services. This sum was used for hospital construction and extension and the eradication of malaria. The programme was successful as far as it went (malaria, for example, has almost completely disappeared in Swaziland) but there are still only 2.6 hospital beds for every 1,000 people in the Territory.

64. In compiling its development programme for 1960-64, the Medical Department, as other departments of Government, has had to take account of the incipient industrialisation of the Territory. In effect this means the provision of more hospital beds and other therapeutic services for the labour forces of those new enterprises which, although they usually provide out-patient facilities, cannot be expected to give full-scale hospital treatment on the spot.

65. The proposals for the period 1960-64 are as follows:-

(a) Extensions to Mbabane Hospital. £325,000.

66. The World Health Organisation Consultant on Hospital Construction visited Swaziland in 1959 and reported on the Government hospital at Mbabane. He recommended that an entirely new hospital of 250 - 300 beds should be built on another site. Consultants were engaged to draw up plans for a hospital of this size, but as the cost of their proposals was estimated to be £800,000 for the first stage only, the project was regretfully abandoned and plans for extensions to the existing building have now been commissioned. It is estimated that the cost will be £325,000 but this cannot yet be regarded as a firm estimate.

67. Whether it is enlarged or not, the hospital will have to serve new projects with large labour forces in the Mbabane and Piggs Peak districts. If finance is not made available for the proposed extensions, the hospital, already overcrowded, will be quite unable to perform its functions.

(b) Extensions to Piggs Peak Hospital. £10,000.

68. The Piggs Peak Hospital was opened in 1958. It has 16 beds for Africans but the daily average number of

23/.....

in-patients is 35. This congestion must be relieved and it is proposed to do this by adding 14 beds. The W.H.O. Consultant agreed with this proposal.

(c) Extensions to the Raleigh Fitkin Memorial Hospital £11,500.

69. The Raleigh Fitkin Memorial Hospital is run by the Nazarene Mission at Bremersdorp. It receives an annual subsidy from Government of some £9,000.

70. There is a pressing demand in the Bremersdorp area for more hospital beds for Europeans. This is due to the agricultural and industrial development now taking place in this area. The Mission has plans for alleviating the pressure on hospital services by providing 10 more beds (there are already 8) for Europeans. The cost is estimated to be £5,000 and it is proposed that Government should bear half this amount.

71. The Mission also runs a training school for African nurses - the only one in Swaziland. It accommodates 48 trainee nurses. The Mission proposes to increase the trainees to 80. Training facilities are ample for this number but new dining hall, dormitory and kitchen facilities are required. The cost will be £9,000 which Government should bear in full.

(d) Bilharzia Control. £20,000.

72. With the expansion of irrigation in Swaziland the spread of bilharzia - a snail-borne disease - seems a certainty. Fortunately for the time being it does not appear to have a serious effect on the African population although about 30% are infected.

73. No effective means of controlling bilharzia has yet been discovered but investigations are being made in other parts of the world. It would be beyond the resources of this Territory to carry out the detailed researches required to solve this stubborn problem but it would be wise to have funds ready to take immediate advantage of any discoveries made in the near future.

(e) Clinics. £12,000.

74. There are already 23 clinics in Swaziland operated

by the Missions, Government and the Swazi Nation. These clinics provide simple medical services in areas far removed from hospitals and are therefore of great value to the communities in which they are established.

75. It is proposed to build one more clinic a year for the next four years. They will be operated and staffed at the expense of the Swazi National Treasury.

(f) Tuberculosis Control. £40,150.

76. The World Health Organisation Tuberculosis team visited Swaziland in 1956/57 and ascertained that up to 1.6% of the population (about 3,680 persons) was suffering from open Tuberculosis and an indeterminate number from less serious tubercular infections. The cost of providing hospital beds for this number would be prohibitive and it was recommended by the World Health Organisation Tuberculosis Consultant that treatment should be carried out in the patients' homes. The first step would be to organise a case-finding team to tour the Territory and test the whole population. Those found to be suffering from the disease would then be treated with INAH and PAS by health visitors in their homes for twelve months.

77. This scheme which will cost £135,360 has been accepted by the Colonial Office Medical Adviser with certain modifications. W.H.O. will, it is proposed, recruit and pay professional staff and provide mobile equipment. UNICEF will meet part of the cost of drugs and the Chamber of Mines have agreed to contribute £5,000 a year to the cost of the scheme. The balance of £40,150 will be a charge on Government and it is proposed to seek this amount from C.D. & W. funds.

78. The scheme is purely therapeutic and does not strike at the causes of the disease. These can best be attacked by increasing food production and improving living standards generally, both of which are objectives of the development plan.

79. The phasing of the above schemes would be as follows:-

1960-64.

	1960/61	1961/62	1962/63	1963/64	TOTAL
Mbabane Hospital	25,000	175,000	125,000	-	325,000
Piggs Peak Hospital	-	-	10,000	-	10,000
Raleigh Fitkin Memorial Hospital	11,500	-	-	-	11,500
Bilharzia	-	-	-	20,000	20,000
Clinics	3,000	3,000	3,000	3,000	12,000
Tuberculosis	40,069	30,893	31,809	32,589	135,360
	79,569	208,893	169,809	55,589	513,860
Less Contributions	29,940	21,740	21,790	21,740	95,210
	£49,629	187,153	148,019	33,849	418,650

Education.

80. There can be no argument about the immense importance of education in the African context and Swaziland is no exception to this rule. But the problem in this country is not only to provide for the growing population but also to make good the deficiencies of the past.

81. During the development period 1955-60, the bulk of the C.D. & W. money available was devoted to road construction and only £96,000 was provided for the development of education.

82. The thirst for learning, particularly among the Africans, is now such, however, that a much larger sum must be assigned for this purpose. The following table shows the growth of African enrolment:-

Year.	(a) Total Swazi Population.	(b) Estimated number of children of school-going age.	(c) Enrolment	(d) % of (c) to (b)
1946	181,260 (by census)	40,230	10,970 (actual)	27%
1956	234,500 (by census)	53,180	24,832 (actual)	46%
1957	239,500 (estimated)	54,000	26,457	49%
1958	244,500 (estimated)	55,000	29,066 (actual)	53%
1959	250,000	56,250	31,217 (actual)	55%
1960	255,000	57,375	34,000 (estimated)	59%
1965	280,000	63,000	48,500 (estimated)	77%

83. The reason for this increase is that more pupils are staying longer at school, as the following table shows:-

	1956	1959	1960	Increase 1956-60.	Increase % 1956-60	Estimate 1965
PRIMARY.						
Sub-standards	13,999	14,505	15,000	1,001	7%	17,500
Standards I to IV	8,635	13,264	14,800	6,165	71%	21,000
Standards V and VI	1,718	2,643	3,200	1,482	86%	7,500
TOTAL PRIMARY	24,352	30,412	33,000	8,648	35%	46,000
SECONDARY CLASSES.	480	805	1,010	530	110%	2,500
TOTAL PRIMARY & SECONDARY	24,832	31,217	34,010	9,178	37%	48,500

84. This is a new phenomenon and has two direct results:-

(a) Costs will rise because education in the higher classes is more expensive per head than in the lower.

(b) With heavier enrolment, there is a need to diversify secondary education. Clerical, teacher training and technical courses must therefore be provided, so that the products can be absorbed over a wider field of industry and commerce than has been possible, or indeed necessary, in the past.

85. The beginnings of industrialisation in Swaziland have been accompanied by an inflow of Europeans. The new industries are essential to the economic health of the Territory but at the present time they require European skill and finance without which they would soon languish. Europeans in search of a career will not come and live in Swaziland unless there is adequate schooling for their children and so this must be provided. Similarly account must be taken of the needs of the small Eurafrican community.

86. The Economic Survey Mission discussed the basic facts of the situation set out above and scrutinised the preliminary plans for the period 1960-64. They supported the plans as far as they went but had, in brief, the following observations to make:-

(i) There should be drawn up in co-operation with industry a plan for greatly expanded industrial and vocational training.

(ii) "Sandwich" courses in technical subjects should be introduced.

(iii) African primary and secondary education should be improved.

(iv) Building grants to African and Eurafrican schools should be increased.

87. The preliminary development plan for education has been revised and expanded in the light of the Mission's recommendations. The following is a summary of the various projects proposed:-

(a) <u>Post-Secondary Scholarships for Africans. £21,050.</u>

88. The plain fact is that at the present time there are far too few Swazi graduates. For instance, there are only two on the staff of the Swazi National School. Expanded secondary education is one of the cures for this but we must provide more scholarships for suitable matriculants

now coming off the production line in larger numbers. Most of the scholarships proposed will be tenable in the United Kingdom. Bursaries for Roma and Salisbury will still have to be provided but they will be borne by local revenue.

(b) European Education. £166,950.

89. The main project in this scheme is a new hostel at Bremersdorp which will absorb children from areas where recent development has taken place, such as the sugar areas and Malkerns. New hostel accommodation is also planned for St. Mark's School. New classroom blocks must also be built at this school as well as at Goedgegun, Piggs Peak, Mhlambanyathi and Mananga. The above expenditure is quite inescapable if the Territory is to retain its new industrial and agricultural population.

(c) Eurafrican Schools. £35,000.

90. There are about 2,500 Eurafricans in Swaziland and although they are not subject to compulsory education it is hoped to provide enough facilities to enable all Eurafrican children to attend Eurafrican schools.

91. All such schools already receive grants-in-aid from local revenue. The C.D. and W. funds now sought will be used exclusively for new buildings and equipment and local funds will bear any consequential increase in grants-in-aid of salaries and other recurrent costs.

(d) African Teacher Training Centre. £110,000.

92. The output of trained teachers from the existing centres is insufficient to keep up with the increase in enrolment in African schools. The present annual output of teachers is 50 but the number now required is 90.

93. The plan is to build a new teacher training centre near Bremersdorp with an annual output of 65. Two other missionary training centres provide between them 29 teachers annually, making a total of 94 teachers per annum. This number will hold the position until 1965 when further expansion will probably be necessary.

(e) Swazi National High School. £56,600.

94. This is the most important African school in the Territory and provides education for 136 secondary pupils. As elsewhere, enrolment is increasing and the aim is to expand facilities to provide tuition and hostel accommodation for 270 pupils by 1965. Half of the capital cost of this project will be borne by the Swazi Nation.

(f) Clerical Training. £12,046.

95. A few of the more advanced schools in Swaziland include commercial subjects in their curricula but they are not sufficient to be regarded as the equivalent of a proper clerical training.

96. The Economic Survey Mission recommended that a comprehensive clerical course be introduced to meet the growing needs of commerce and industry in Swaziland.

97. The training course will be housed in the buildings vacated by the present teacher training centre and the annual intake for a ? year course will be 15 - 18 students.

(g) African Primary and Secondary Education. £148,418.

98. One of the recommendations of the Economic Survey Mission was that a basic need in Swaziland was to improve and expand African education. The quality of primary education should be raised and the numbers of pupils who continue until Standard VI should be increased.

99. The schemes so far submitted for teacher training, the Swazi National School and scholarships will all contribute directly or indirectly to this end but it is necessary to supply funds for classrooms, laboratories and equipment of all kinds. This expenditure will involve increased current costs which must be borne on the Territorial budget.

(h) Technical Education for Africans. £60,391.

100. The Economic Survey Mission emphasised very strongly the need for vocational and technical training and while they commended the provision made for this purpose in the preliminary development plan, they felt that it did not go far enough. The plan for technical

education has therefore been recast and expanded to include -

(a) Extension to the Mbabane Trades School.

(b) Provision of "sandwich" courses.

(c) Apprenticeship training.

(d) Technical training at secondary schools.

101. In addition to these plans, the Resident Commissioner has appointed a committee representing both industry and Government to keep under review and advise generally on pre-industrial and trade training in the Territory. In this way it is intended that the Swazi should begin to play their full part in the Territory's industries.

102. These are the proposals to improve the standard of education in Swaziland for the period 1960-64. They are phased in the following table:-

EDUCATION: DEVELOPMENT PLAN 1960/64.

	1960/61	1961/62	1962/63	1963/64	Total
Scholarships	3,250	3,850	4,450	4,300	15,850
Economic Survey Mission Proposals	-	800	1,750	2,650	5,200
European Education	91,000	45,750	20,400	9,800	166,950
Eurafrican Schools	4,900	12,000	9,800	1,300	28,000
Economic Survey Mission Proposals	750	2,550	2,050	1,650	7,000
African Teacher Training Centre	44,000	66,000	-	-	110,000
Swazi National High School	13,900	24,200	14,700	3,800	56,600
Clerical Training	-	4,572	2,063	5,411	12,046
Economic Survey Mission Proposals					
African Primary and Secondary Education	28,920	34,965	36,010	25,255	125,150
Economic Survey Mission Proposals	6,660	6,238	6,286	4,084	23,268
African Technical Education	11,210	11,000	2,861	2,122	27,193
Economic Survey Mission Proposals	4,760	17,710	5,002	5,726	33,198
	209,350	229,635	105,372	66,098	610,455
Less Local Contribution	6,950	12,753	8,785	4,282	32,770
Total Grants Required	£202,400	216,882	96,587	61,816	577,685

Telecommunications. £258,000.

103. The telecommunications development plan for the years 1955-60 was designed to renew and expand the telephone system within Swaziland to keep abreast of the growing pace of economic development in the Territory. It can be said to have succeeded in this aim. Within the period the number of telephones has increased from 330 to 2,264 at the present time and there are now 21 radio channels in service within the Territory connecting nearly all the important centres. In addition existing physical routes have been improved and new ones constructed.

104. The plan for 1955-60 was drawn up in 1954 and financed by a loan of £105,000. It has been implemented within 1% of the estimated cost.

105. Telephone and telegraph revenue collections for the period 1955-60 are as follows:-

1955-56	1956-57	1957-58	1958-59	1959-60
£19,000	£21,000	£28,000	£29,000	£42,000 (Estimated)

The increase is entirely due to the expansion of the telephone service over the past five years. Even now the demand for telephones is as pressing as ever and there is no reason to fear that the recent steady increase in revenue will abate before 1965. This gives added force to what follows. If the proposals are approved and can be financed, the Territory should have by 1964 an efficient, modern, internal telephone system with ample connexions radiating to the Union. A further year's work (in 1964-65) will be required to provide improved outlets from Piggs Peak.

106. The broad proposals for the four year plan for 1960-64 are as follows:-

Scheme.	1960/61	1961/62	1962/63	1963/64	Total.
Rehabilitation	68,500	62,550	42,500	1,400	174,950
Outlets to Union	13,000		3,350	-	16,350
New Connexions	25,900	10,000	10,000	10,000	55,900
Transport, etc.	8,400	-	-	-	8,400
Contingencies	600	600	600	600	2,400
TOTAL	116,400	73,150	56,450	12,000	258,000

107. The estimated revenue and expenditure from posts and telegraphs over the period is as follows:-

	1960/61	1961/62	1962/63	1963/64	Total
Revenue	92,650	130,500	138,000	193,500	568,300
Expenditure	84,438	96,300	106,400	116,800	407,700

providing a surplus of £160,000 over expenditure for the years 1960-64. It is not recommended however, that development should in this case, even in part, be financed from revenue. The telephone service is, as has been shown, a revenue earner and as such may be conveniently financed by a loan.

Public Works.

108. The public works programme proposed for 1960-64 forms the major part of the development plan and is divided into the following heads:-

(a)	Roads	£2,636,200
(b)	Water Supplies and Sewerage	£414,170
(c)	Electricity Supplies	£1,000,000
(d)	Housing	£496,000
(e)	Public Buildings	£467,500
(f)	Airfields	£60,000
(g)	Townships	£220,000
(h)	Plant and Transport	£135,000
	TOTAL	£5,428,870

(a) Roads. £2,636,200.

109. The total expenditure on roads in the period 1955-60 was £1,577,234. The plan was based on Sir Arthur Griffin's report on communications dated April, 1956. For the period 1960-65 Sir Arthur recommended the improvement to bitumen standard of certain important roads in the Territory - a total of 115 miles. With the construction of the pulp mill in the Usutu Forests, Government is now committed to providing a black-top road and/or a railway from the mill to the Swaziland/Mozambique border (Mhlumeni) - a distance of 97 miles. Only about 12 miles of this route coincides with Sir Arthur Griffin's proposals.

110. The Economic Survey Mission examined the road proposals in the light of the Territory's immediate and long term needs and recommended that the following roads should be constructed:-

(i) Pulp Mill site - Mocambique border.
97 miles to blacktop.

(ii) Oshoek - Mbabane - Mahlanya.
29 miles to blacktop.

(iii) Big Bend - Sipofaneni.
30 miles to blacktop.

(iv) Maloma to Big Bend.
20 miles to gravel.

(v) Sipofaneni to Helehele.
25 miles to gravel.

(vi) Piggs Peak to Border.
40 miles to blacktop.

(vii) Swaziland Irrigation Scheme to Border.
6 miles to blacktop.

This programme is estimated to cost £3,704,000.

111. The Mission proposed that items (i), (iii) (iv) and part of (ii) should be put in hand in 1960-62. This would cost £2,636,000 and they recommended that the money should be provided by way of a free grant. As £800,000 had already been earmarked from the C.D. & W. Fund, the grant would amount to £1,836,000.

112. At the time of writing, decisions on the construction of a railway between Goba on the Mocambique Border and Ponvu Ridge are imminent. The road programme has therefore been recast to meet the changed situation and the cost reduced to £2,636,200 for the whole four year period.

113. The following are the details of the revised road programme showing total cost and probable expenditure during 1960-64:-

Project A: Usutu Forests Mill Site - Mhlumeni (Border Swaziland/Portuguese East Africa) to blacktop standard: £1,778,000.

	Project Stage Total	Probable Expenditure 1960-64.
Stage 1(a): Construction to gravel standard Matapha - Mill Site - Transvaal Border	£280,000	£280,000

C.D. & W. Funds have already been approved under Scheme D.3873. Work is now in hand and the project is scheduled for completion in September, 1960. The indications are that this stage of the project will be completed within the estimate.

Stage 1(b): Blacktop Construction Matapha - Mill Site:	£372,000	£372,000

Planning is at present in hand and an application for funds will be made when the design is further advanced.

Stage 2(a): Construction to gravel standard Matapha - Point X:	£230,000	£230,000

Planning is in hand and funds will be requested when the design is further advanced. Whatever decisions are taken on rail communications this section will have to be reconstructed as it would be extremely unwise to accept the pulp, and other traffic which this will generate, on this route as it is at present. Reconstruction of the major portion of the route will in any case be necessary in the present development period.

Stage 2(b): Blacktop Construction Matapha - Point X:	£400,000	£210,000

Provision is made to carry blacktop just beyond Bremersdorp in 1960-64.

	Project Stage Total.	Probable Expenditure 1960-64.
Planning for this stage will be deferred until 2(a) is in hand.		
Stage 3(a): Construction to Gravel standard Point X - Mhlumeni:	£196,000	-
Location survey now complete and design is deferred pending advice on rail developments.		
Stage 3(b): Blacktop Construction Point X - Mhlumeni:	£300,000	-
Planning deferred until 3(a) is in hand.		
TOTAL PROJECT A:	£1,778,000	£1,092,000

All planning on Project A is being financed from Scheme D.3934 at a total cost of £55 510. Scheme D.3934 also has £7,900 for the planning of Project B making a total of £63,410 on Scheme D.3934.

Project B: Oshoek - Mbabane - Mahlanya Construction to Blacktop standard: £350,000.

With the exception of the first five miles from the Transvaal Border at Oshoek the whole of this route (29 miles) including the Mbabane escarpment, has been completed to gravel standard in the 1955-60 programme. The bitumenisation of this section of road was recommended for the second five year programme in the 1956 Griffin/Reynolds report. The prospect of iron ore development at Bomvu Ridge is added justification for this project.

	Project Stage Total.	Probable Expenditure 1960-64.
Stage 1: Blacktop Construction Mbabane - Mahlanya:	£180,000	£180,000
Traffic conditions demand that this section of the route be bitumenised immediately. The		

	Project Stage Total	Probable Expenditure 1960-64.
section will then be linked to the blacktop road between Bremersdorp and the Pulp Mill The Economic Survey Mission has recommended the expenditure of £150,000 on this project but as a result of the latest design information, the estimate of cost has increased to £180,000.		
Stage 2: Blacktop Construction Mbabane - Motjane: This is the first stage of black-topping the road between Mbabane and Bomvu Ridge/Transvaal border.	£95,000	£95,000
Stage 3(a): Construction to gravel standard Motjane-Oshoek: This is the section referred to above which has not been recon-structed. Planning is complete and construction should proceed as soon as possible.	£25,000	£25,000

Stage 3(b): Blacktop Construction Motjane - Oshoek:	£50,000	£50,000

If iron ore is developed at Bomvu, traffic increase will call for blacktop on this section. Planning would commence when 3(a) is undertaken.

TOTAL PROJECT B:	£350,000	£350,000

Project C: Maloma - Big Bend - Sipofaneni construction to blacktop standard: £720,000.

	Project Stage Total	Probable Expenditure 1960-64.
Stage 1: Reconstruction to gravel standard Big Bend-Sipofaneni and Big Bend Bridge approaches:	£85,000	£85,000

Attached at Annexure "B" is an application for funds for the con-

	Project Stage Total	Probable Expenditure 1960-64.

struction of this route. This was recommended in the Griffin/Reynolds Report of 1956 and the commitment is now inescapable. The advent of a railway line will make the construction of this section even more important.

Stage 2: Construction of Maloma - Big Bend to gravel standard: £150,000 £150,000

If coal mining starts at Maloma a road will have to be constructed to serve the area and in order to link with rail at Sipofaneni via Big Bend. Planning will proceed on this project, but no funds will be sought until rail development is certain.

Stage 3: Blacktop construction in Big Bend area and from Maloma to Sipofaneni: £485,000 £100,000

The full extent of blacktop which will be required in the present development period in the area to serve the Big Bend sugar industry and the possible coal production at Maloma will not be determined accurately until decisions are reached regarding the railway and the coal industry. The advent of a railway to Sipofaneni would encourage coal mining at Maloma and will result in heavy coal traffic being channelled along the route. Application for funds would be made as development proceeds. The probable expenditure in the 1960-64 period would be to meet traffic conditions induced by sugar traffic in the Mill area.

TOTAL PROJECT C: £720,000 £335,000

Project D: Nokwane - Mhlume - S.I.S. - Border Gate: £350,000.

The Mission's recommendation (vii) may have to be extended to Nokwane thus taking in the whole sugar area in Northern Swaziland. Tentative provision for this work is therefore included in the plan but it need not be confirmed until a decision on the railway has been taken.

	Project Stage Total	Probable Expenditure 1960-64.
Stage 1: Reconstruction to gravel standard Nokwane - Mhlume: The roads constructed by the Mhlume Company are fairly well aligned, but lack substantial foundations. Construction to blacktop is inescapable for the traffic that has to be handled, and is likely to be costly.	£50,000	£50,000
Stage 2: Blacktop construction: Construction would commence in the Mill area working outward along the busiest routes. This would lead on to a final stage which would be the further construction to blacktop standard either in the direction of the Transvaal Border at Border Gate or southwards towards rail facilities in Swaziland depending on how communications in the Territory develop. This, however, would not be undertaken in the present development period.	£300,000	£100,000
TOTAL PROJECT D:	£350,000	£150,000

Project E: Point X - Nokwane to gravel standard: £95,000.

The prosperous sugar area around the Mhlume Mill might be encouraged to participate in the commerce of Swaziland if all-weather communications with the rest of the Territory were provided. At present all business from the Mhlume area tends to be transacted across the border in the Transvaal.

The first stage in this project would be to bridge the Black Umbuluzi at Nokwane as suggested in Project G.2, and to build an all weather road from this point to link with the main east-west road at Point X. Final decisions on the precise route of the road south from Nokwane need not be taken until the railway is built.

	Project Stage Total.	Probable Expenditure 1960-64.
TOTAL PROJECT E:	£95,000	£95,000

Project F: Hele Hele - Sipofaneni construction to gravel standard: £150,000.

A railway at Sipofaneni, and the new road between Big Bend and Sipofaneni will attract progressively more traffic to the Sipofaneni - Hele Hele - Bremersdorp route which will become one of the principal roads in the Territory. The present alignment is poor and travelling conditions will be dangerous unless the road is re-aligned and reconstructed. This was one of the 1956 Griffin/ Reynolds recommendations for the second Five Year programme.

	Project Stage Total.	Probable Expenditure 1960-64.
TOTAL PROJECT F:	£150,000	£150,000

Project G: Bridging: £203,000.

It is essential that the bridges enumerated below be constructed during the development period. No location survey or design studies of these proposed projects have as yet been undertaken, but it is considered necessary that planning should be put in hand immediately.

Bridge location will be carried out departmentally, but it is proposed to have the foundation investigations and the scrutiny of tenders done by Consultants.

An application for funds for these bridges is attached and Annexure "C" shows the phasing of works and expenditure under the project for the development period.

In view of the fact that planning has not yet commenced the figures shown below are merely a guide to the size of the project. The first year's allocation is merely to enable planning to be put in hand at an early date and future application for funds will be submitted when actual costs can be more accurately assessed.

	Project Stage Total.	Probable Expenditure 1960-64.
1. Ingwavuma at Nsoko: The present bridge over the Ingwavuma at Nsoko is sub-standard and seriously overloaded by present traffic. It should be replaced immediately.	£70,000	£70,000
2. Black Umbuluzi at Nokwane: The Black Umbuluzi is the only major river on the northsouth road through Swaziland which is not bridged, and is therefore frequently impassable. Progressively more traffic is being attracted to this route on which further works are proposed under Project E and bridging is essential for the safety and convenience of the travelling public, especially as this is on the link road between the Mhlume area and its administrative centre of Stegi. Even if Project E does not materialise, this bridge is urgently required.	£60,000	£60,000
3. Bridges Big Bend - Sipofaneni: and Minor bridges: As considerable realignment will be necessary under Scheme G.1 above, new bridges will have to be provided on this section.	£73,000	£73,000
TOTAL PROJECT G:	£203,000	£203,000

Project H: Planning and Supervision: £161,200.

This is the continuation of an existing scheme and will meet the salaries and other charges for Engineers, Surveyors, Clerks of Works and other contract personnel.

TOTAL PROJECT H:	£161,200	£161,200

Project I: Roads to serve Peak Timbers: £568,000.

The development pattern of Peak Timbers has undergone some radical changes in the last twelve months and little is known of the Company's present thinking. There is a distinct possibility that Peak Timbers plantations will be sold to a Pulp Company which may be set up in the Union, in which case an excessive tonnage of lumber will be hauled over Swaziland roads and the provision of a permanent surfaced road is likely to be economically unattractive to the Territory which is not going to derive the benefit it might have expected from the exploitation of the plantations. On the other hand, the road will be used as a public road and Swaziland will be faced with an extremely unpleasant problem in attempting to maintain this as a gravel road. It is hoped, however, that capital expenditure on roads to serve what may prove to be a relatively uneconomic proposition from Swaziland's point of view may be deferred until the latter part of the present development period. The possible capital commitment should not, however, be overlooked.

TOTAL PROJECT I:	£568,000	£100,000
GRAND TOTAL FOR ROADS, BRIDGES AND PLANNING DEVELOPMENT PERIOD 1960-64:	£4,375,200	£2,636,200

The road programme will be phased as follows:-

Project	1960/61	1961/62	1962/63	1963/64	Total.
A	602,500	389,500	100,000	-	1,092,000
B	100,000	175,000	75,000	-	350,000
C	85,000	-	105,000	145,000	335,000
D	-	-	-	150,000	150,000
E	-	80,000	15,000	-	95,000
F	-	-	75,000	75,000	150,000
G	10,000	60,000	60,000	73,000	203,000
H	63,600	27,600	37,200	32,800	161,200
I	-	-	20,000	80,000	100,000
TOTAL	£861,100	732,100	487,200	555,800	2,636,200

(b) Water Supplies and Sewerage. £414,170.

114. No municipal bodies have yet been formed in Swaziland. The burden of providing water supplies and sewerage for townships has therefore fallen on Government. Steps are now being taken to form municipalities at Mbabane and Bremersdorp and it is hoped that, while the following schemes cannot be delayed much longer, the expenditure proposed will become a charge on the municipality concerned and so relieve Government finances.

(i) Mbabane Water Supply: £150,000:

115. The present Mbabane Water Supply is barely sufficient to meet the needs of the community and shortages have been experienced in prolonged dry spells. The estimate is based primarily on the Consultants' preliminary report which has just been received, but not studied in detail and which is in respect of raw water supply and purification works only. The figure includes a token amount for reticulation extension.

(ii) Other Water Supplies: £75,000.

116. The expanding economy will make demands on water supplies in districts which it is difficult to foresee in entirety at present. The estimate is an "informed guess" made in the light of probable requirements.

(iii) Sewerage, Bremersdorp: £75,000.

117. If capital funds were available now it would be desirable to provide sewerage for the high density areas

of Bremersdorp immediately. The commitment is reaching serious proportions and cannot be deferred much longer. This figure is given as a token one only since planning has not yet been inaugurated.

(iv) Sewerage, Mbabane, and Water Supply, Bremersdorp: £114,170.

118. These two schemes are under construction and the figure shown represents firm commitments to complete them.

It is proposed to phase the above expenditure as follows:-

	1960/61	1961/62	1962/63	1963/64	Total.
Mbabane Water Supply	13,000	17,300	75,000	44,700	150,000
Other Water Supplies	19,000	29,000	15,000	12,000	75,000
Sewerage, Bremersdorp	5,000	50,000	20,000	-	75,000
Sewerage, Mbabane and Water Supply Bremersdorp	114,170	-	-	-	114,170
	151,170	96,300	110,000	56,700	414,170

(c) Electricity Supplies: £1,000,000.

119. The Swaziland Government runs electricity supply schemes at Mbabane and Bremersdorp but expansion is urgently required at both places. In view of this and of other potential demands for power, the Swaziland Board of Engineers drew up a hydro-electric scheme, capable of almost unlimited staged development, on the Little Usutu and the Great Usutu.

120. The demand at the end of 1962 is likely to be 4 megawatts comprising Mbabane, Bremersdorp, Malkerns, the Swaziland Iron Ore Development Company and the domestic needs of the Usutu Pulp Company. If all these demands are confirmed, a start can be made on the first stage of the scheme. The cost is estimated to be £980,000. The scheme will be self-servicing and it is hoped to raise the money on the London market. An

application will be submitted as soon as Government is assured of the necessary demand for power.

121. In addition the sum of £20,000 must be provided for the installation of diesel sets in order to meet local demands until hydro-electric power is available.

122. This expenditure is likely to be phased as follows:-

	1960/61	1961/62	1962/63	1963/64	Total
Territorial Scheme	200,000	380,000	400,000	-	980,000
Additional generation	20,000	-	-	-	20,000
	220,000	380,000	400,000	-	1,000,000

(d) Housing: £496,000.

123. The cost of housing required by 1964 to take account of the heavy backlog and the needs of new staff was estimated to be £646,000.

124. This figure has now been reduced and it is proposed to build housing at the following cost in the years 1960-64:-

	1960/61	1961/62	1962/63	1963/64	Total.
Administration	16,000	16,000	16,000	16,000	64,000
Police	26,500	26,500	26,500	26,500	106,000
Education	40,000	24,000	20,000	23,000	107,000
Prisons	20,000	30,000	19,000	-	69,000
Medical	6,000	20,000	15,000	-	41,000
Posts and Telegraphs	12,500	12,500	12,500	12,500	50,000
Public Works	8,000	12,000	8,000	8,000	36,000
Land Utilization	23,000	-	-	-	23,000
	152,000	141,000	117,000	86,000	496,000

(e) Public Buildings: £467,500.

125. The original bid for finance for public buildings was £687,500. This has been reduced by £220,000 but it

should not be thought that the original proposals were in any way extravagent. There is a considerable backlog to make up and much of the amount required would be devoted to this end. The principal item is £200,000 for a new Secretariat building which would provide accommodation for the Medical, Education and Audit Departments, the Treasury and the existing Secretariat set-up. At present all these departments are accommodated in a hotch-potch of antiquated, overcrowded buildings, prefabs and rented offices.

126. The other proposals which are listed below have been carefully considered in the light of the Territory's urgent needs over the next four years and are phased as follows:-

	1960/61	1961/62	1962/63	1963/64	Total.
Administration:					
Central Government Offices	10,000	150,000	40,000	-	200,000
Extensions to Administrative Offices	10,000	2,000	-	-	12,000
Police Department:					
Extensions to Headquarters	-	7,000	8,000	-	15,000
Police Station at Mill Site	5,000	-	-	-	5,000
Police Station, Piggs Peak	5,000	-	-	-	5,000
Police Station, Stegi	5,000	-	-	-	5,000
Border Post to serve Railway	-	6,000	-	-	6,000
Police Station, Nomahasha	-	2,000	-	-	2,000
Police Station, Hlatikulu	-	-	3,000	-	3,000
Education Department:					
Piggs Peak Hostel	22,500	-	-	-	22,500
St. Mark's Tuition Block	15,000	-	-	-	15,000
Stegi School	4,000	-	-	-	4,000
Makhonza School	4,000	-	-	-	4,000
Girls' Hostel, St. Mark's	13,000	-	-	-	13,000
St. Mark's Primary	5,000	-	-	-	5,000
Prisons Department:					
Bremersdorp Prison	9,000	66,000	-	-	75,000
Carried fwd. .	107,500	233,000	51,000	-	391,500

	1960/61	1961/62	1962/63	1963/64	Total
Brought fwd..	107,500	233,000	51,000	-	391,500
Posts & Telegraphs Department:					
Mbabane Post Office	28,000	-	-	-	28,000
Mbabane Telephone Exchange	2,000	-	-	-	2,000
Postal Agencies	2,000	1,000	1,000	1,000	5,000
Goedgegun Post Office	1,000	-	-	-	1,000
Public Works Department:					
Head Office Block	26,000	-	-	-	26,000
Workshop Extensions	5,000	-	-	-	5,000
Land Utilization Department:					
Bremersdorp Office Extensions	4,000	-	-	-	4,000
Goedgegun Office Extensions	2,500	-	-	-	2,500
Hlatikulu Office Extensions	-	2,500	-	-	2,500
TOTALS	£178,000	236,500	52,000	1,000	467,500

(f) Airfields: £60,000.

127. There is as yet no suitable airfield in Swaziland for any but light aircraft and as there is considerable air traffic in and out of the Territory with promise of expansion in the future, the time has come to provide safe landing grounds.

128. A thorough investigation has now been made in consultation with the High Commissioner's Air Adviser and two sites have been provisionally chosen:

(i) Mafutseni. £50,000.

129. This lies between Stegi and Bremersdorp and would be a single runway 5,000 feet long. It should be constructed for use by scheduled feeder services, by charter aircraft and also for defence purposes. This area has been chosen because it is conveniently situated for present and future centres of development and also because it is not subject to ground mists. The cost of

a runway of compacted gravel is likely to be £50,000.

(ii) Malkerns. £5,000.

130. Although, owing to prevalence of ground mists and the propinquity of high mountains, this site cannot be regarded as an all-weather airfield, the area is convenient for Mbabane, Bremersdorp and Usutu Forests where much development is at present taking place. A single grassed runway could be located above the area commanded by the Malkerns irrigation canal. The cost would be about £5,000.

(iii) Other Airfields. £5,000.

131. It is proposed that the sum of £5,000 should be provided for the establishment of minor airstrips in the South of the Territory. No detailed investigations have yet taken place.

132. This expenditure will be phased as follows:-

	1960/61	1961/62	1962/63	1963/64	Total.
Mafutseni	50,000	-	-	-	50,000
Malkerns	5,000	-	-	-	5,000
Others	-	2,000	2,000	1,000	5,000
	£55,000	2,000	2,000	1,000	60,000

(g) Townships. £220,000.

(i) Township Roads and Drainage: £120,000.

133. The surfacing of roads in Mbabane and Bremersdorp and the provision of stormwater drainage has already been planned in detail and is likely to cost £120,000. If municipal organisations are established in these townships, the money should be made available to them as a loan. The extent to which they will be able to bear a loan of this order has not yet been estimated and it is likely that the works proposed in this paragraph will have to be subsidised in part by Government.

(ii) Township Development: £100,000.

134. Proposals for the development of a township at Piggs Peak are now finalised and are likely to cost

£30,000. Similar development will soon be required at Msunduza in Mbabane. Besides other urban area requirements, a township may have to be developed at Matapha, if a railway is built. An integral part of township development is considered to be the provision of housing loans for Africans to ensure that houses of the prescribed standard are built. The sum of £20,000 should be set aside for this purpose.

The provision of the sum of £100,000 is recommended but it is likely to be insufficient.

135. This scheme will be phased as follows:-

	1960/61	1961/62	1962/63	1963/64	Total
Roads and Drainage	30,000	30,000	30,000	30,000	120,000
Township Development	20,000	20,000	20,000	20,000	80,000
Housing Loans	10,000	10,000	-	-	20,000
	£60,000	60,000	50,000	50,000	220,000

(h) Plant and Transport: £135,000.

136. The purpose of this loan is to replace plant and transport in the District Administration and the Public Works Department. This is an inescapable commitment and is not revenue earning but it is placed in the loan programme so that any grant-in-aid the Territory may have to seek will be reduced by that amount.

Phasing will be as follows:-

	1960/61	1961/62	1962/63	1963/64	Total
Plant and Transport	45,000	30,000	30,000	30,000	135,000

AGRICULTURAL LOANS: £50,000.

137. The importance of loans for farmers in a developing agricultural country like Swaziland surely requires no further emphasis. Owing to lack of money, the Land and Agricultural Loan Fund, established by Proclamation in 1929, has made no disbursements for some years.

138. The Economic Survey Mission have recommended in their Report that a grant of £50,000 be made to the Land and Agricultural Loan Fund in order to provide small loans to both European and African farmers. A new Loan Fund Proclamation is at present in preparation.

139. The sum of £25,000 per annum should be available for the years 1960-62.

COTTAGE INDUSTRIES: £5,000.

140. The Economic Survey Mission were impressed by the various evidences of the manual dexterity of the Swazi. There is a small hand-weaving factory at Piggs Peak, the products of which are of very high standard. Local Swazi handicrafts are sold in quantity at Mbabane, Bremersdorp and Piggs Peak mainly to tourists. The Mission felt that if these activities were encouraged and properly organised, Swazi women would be provided with a small additional of income. They accordingly recommended that a grant of £5,000 should be made and devoted to cottage industries at the rate of £2,500 per annum for the years 1960-62.

141. The following pages show the whole development plan in tabular form, the proposed method of financing it and its phasing.

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SWAZILAND

DEVELOPMENT PLAN 1960-64 SHOWING METHOD OF FINANCING.

	C.D. & W. Territorial	C.D. & W. Central.	Economic Survey Mission Free Grant.	Economic Survey Mission Other Recommendations.	Loan.	W.H.O. etc.	Swazi National Treasury	Local Contribution
Land Utilization	247,513	121,148	-	223,980	-	-	-	119,484
Medical	418,650	-	-	-	-	95,210	-	-
Education	496,973	-	-	80,712	-	-	28,300	4,470
Telecommunications	-	-	-	-	258,000	-	-	-
Roads	800,000	-	1,836,200	-	-	-	-	-
Water Supplies and Sewerage	-	-	-	-	414,170	-	-	-
Electricity	-	-	-	-	1,000,000	-	-	-
Housing	-	-	325,000	-	171,000	-	-	-
Public Buildings	-	-	225,000	-	242,500	-	-	-
Airfields	-	-	-	-	60,000	-	-	-
Townships	-	-	-	-	220,000	-	-	-
Transport and Plant	-	-	-	-	135,000	-	-	-
Agricultural Loans	-	-	50,000	-	-	-	-	-
Cottage Industries	-	-	5,000	-	-	-	-	-
	1,963,136	121,148	2,441,200	304,692	2,500,670	95,210	28,300	123,954

Reserve £36,864

Total C.D. & W. Allocation £2,000,000

S W A Z I L A N D

DEVELOPMENT PLAN 1960-64 SHOWING METHOD OF FINANCING.

	C.D. & W. Territorial	C.D. & W. Central.	Economic Survey Mission Free Grant.	Economic Survey Mission Other Recommenda-tions.	Loan.	W.H.O. etc.	Swazi National Treasury	Local Contribution	Total.
tilization	247,513	121,148	-	223,980	-	-	-	119,484	712,125
l	418,650	-	-	-	-	95,210	-	-	513,860
ion	496,973	-	-	80,712	-	-	28,300	4,470	610,455
mmunications	-	-	-	-	258,000	-	-	-	258,000
	800,000	-	1,836,200	-	-	-	-	-	2,636,200
Supplies and age	-	-	-	-	414,170	-	-	-	414,170
icity	-	-	-	-	1,000,000	-	-	-	1,000,000
g	-	-	325,000	-	171,000	-	-	-	496,000
Buildings	-	-	225,000	-	242,500	-	-	-	467,500
lds	-	-	-	-	60,000	-	-	-	60,000
ips	-	-	-	-	220,000	-	-	-	220,000
ort and Plant	-	-	-	-	135,000	-	-	-	135,000
ltural Loans	-	-	50,000	-	-	-	-	-	50,000
e Industries	-	-	5,000	-	-	-	-	-	5,000
	1,963,136	121,148	2,441,200	304,692	2,500,670	95,210	28,300	123,954	7,578,310

rve	£36,864
C.D. & W. ation	£2,000,000

S W A Z I L A N D.

PHASING OF DEVELOPMENT PLAN 1960-64.

	1960/61.	1961/62.	1962/63.	1963/64.	TOTAL.
Land Utilization	321,705	134,072	146,408	109,940	712,125
Medical	79,569	208,893	169,809	55,589	513,860
Education	209,350	229,635	105,372	66,098	610,455
Telecommunications	116,400	73,150	56,450	12,000	258,000
Roads	861,100	732,100	487,200	555,800	2,636,200
Water Supplies, etc.	151,170	96,300	110,000	56,700	414,170
Electricity	220,000	380,000	400,000	-	1,000,000
Housing	152,000	141,000	117,000	86,000	496,000
Public Buildings	178,000	236,500	52,000	1,000	467,500
Airfields	55,000	2,000	2,000	1,000	60,000
Townships	60,000	60,000	50,000	50,000	220,000
Transport and Plant	45,000	30,000	30,000	30,000	135,000
Agricultural Loans	25,000	25,000	-	-	50,000
Cottage Industries	2,500	2,500	-	-	5,000
	£2,476,794	2,351,150	1,726,239	1,024,127	£7,578,310

S W A Z I L A N D.

DEVELOPMENT PLAN 1960-64.

PHASING OF DIFFERENT TYPES OF FINANCE.

	1960-61	1961-62	1962-63	1963-64	TOTAL.
C.D. & W. Territorial	739,504	830,749	296,514	96,369	1,963,136
C.D. & W. Central	62,910	35,501	15,524	7,213	121,148
Economic Survey Mission Free Grant	653,600	548,850	596,950	641,800	2,441,200
Other Economic Survey Mission recommendations	161,617	51,710	40,885	50,480	304,692
Loans	812,570	829,700	707,700	150,700	2,500,670
World Health Organisation, etc.	29,940	21,740	21,790	21,740	95,210
Swazi National School	6,950	12,100	7,350	1,900	28,300
Local Contributions	9,703	20,800	19,526	53,925	123,954
	2,476,794	2,351,150	1,726,239	1,024,127	£7,578,310

142. The development plan is estimated to cost £7,578,310 and if the assumptions made on page 4 are realistic, funds should not be lacking to finance it. But it would be idle to say more about the provision of finance until decisions on the Economic Survey Mission Report have been taken by Her Majesty's Government.

143. The deficit of £1,071,744 shown in the estimates of territorial revenue and expenditure over the period 1960-64 is disquieting, but long range estimates are notoriously subject to all kinds of errors and it may be that with the cumulative effect of economic development in the territory, our fears will be confounded. Present indications are however that Swaziland will have to seek a grant-in-aid in 1961/62. This, if necessary, will be the subject, in due course, of a separate submission to the Secretary of State.

144. Swaziland stands at the threshold of a decade of change in Africa and cannot remain untouched by events in other parts of the continent. When these changes reach the territory, they may bring with them stresses and upheavals. It is important that economic and social development should be pressed forward in order to take the impending strain. The plan for 1960-64 is exceedingly costly in comparison with previous plans but we are satisfied that nothing less will do at the present time. There are great hopes that Swaziland will eventually emerge from the chrysalis as a prosperous contented country with a good standard of living for all. To achieve this, goodwill is essential but not enough. Money is also required. In the prevailing climate of opinion in the United Kingdom it will surely be provided.

MBABANE.

March, 1960

Appendix I.

SWAZILAND.

TUBERCULOSIS CONTROL SCHEME.

1. Administering Authority : Swaziland.
2. Allocation : Swaziland.
3. Classification : Medical Services.
4. Description of Scheme : Tuberculosis Control.
5. Total Cost. : £135,360
6. C.D.W. Assistance required : £ 40,150.
7. Basis of Administration for accounting purposes.

	£	£
Capital.	9,250	
Recurrent		
Personal Emoluments	80946	
Other charges	45164	126,110
		135,360

8. Basis of Calculation of claim where grant does not provide for 100% of cost.

	UNICEF & WHO	C.D.W.	TOTAL.
Capital £	8,250	1,000	9,250
Personal Emoluments.	47,676	33,270	80,946
Other charges.	19,284	25,880	45,164
£	75,210	60,150	135,360
Less N.R.C. Deferred Pay Interest Fund Contribution.		20,000	
C.D. & W. Assistance required.		40,150	

ANNEXURE II.

DETAILED ESTIMATES.

	1960/61	1961/62	1962/63	1963/64	Total	Observations.
CAPITAL EXPENDITURE.						
1. 1 Mobile X-ray Unit comprising 2 Vehicles and generator.	5,000				5,000	From UNICEF.
2. 2 Land Rovers L.W.B.	1,700				1,700	" "
3. 1 Field Laboratory.	700				700	" "
4. 32 Bicycles.	450		50		500	
5. BCG Vaccination equipment, calculating machine etc.	350				350	" "
6. Buildings - extensions to Health Office, Bremersdorp.	1,000				1,000	
Total Capital	9,200		50		9,250	
Recurrent						
PERSONAL EMOLUMENTS.						
7. Medical Officer.	3,861	3,861	3,861	3,861	15,444	From United Nations Technical Assistance Board
8. X-ray Technician	2,686	2,686	2,686	2,686	10,744	
9. Laboratory Technician.	2,686	2,686	2,686	2,686	10,744	
10. Public Health Nurse.	2,686	2,686	2,686	2,686	10,744	
11. 1 Senior Health Visitor Gr.II.	240	264	264	288	1,056	
12. 29 Health Visitors Grade III.	3,828	3,828	4,350	4,872	16,878	
13. 1-X-ray Assistant Grade III.	132	132	150	168	582	
14. 1 Clerk/Storeman Grade I.	132	132	150	168	582	
15. 2 Clerks (Field) Grade I.	264	264	300	336	1,164	
16. 4 Drivers, Grade III	528	528	600	672	2,328	
17. Casual Labour	100	100	100	100	400	
18. Field Allowance 37 @ £30 p.a.	1,110	1,110	1,110	1,110	4,440	
19. Subsistence Allowance for WHO staff @ £1 per diem per person.	1,460	1,460	1,460	1,460	5,840	
Total Personal Emoluments.	£19,713	19,737	20,403	21,093	80,946	

2/.....

OTHER CHARGES.	1960/61	1961/62	1962/63	1963/64	Total.	Observations.
20. Drugs and Vaccines.	7,222	7,222	7,222	7,222	28,888	£2857 p.a. for INH and Vaccine from UNICEF.
21. X-ray materials.	1,786	1,786	1,786	1,786	7,144	To be provided by UNICEF.
22. Laboratory requisites and field requirements.	250	250	250	250	1,000	
23. Operation and maintenance of transport.	1,660	1,660	1,860	2,000	7,180	
24. Stationery, postage & cables.	238	238	238	238	952	£178 p.a. from UNICEF.
Total other charges.	11,156	11,156	11,356	11,496	45,164	
Total Recurrent.	30,869	30,893	31,759	32,589	126,110	
Total Scheme.	40,069	30,893	31,809	32,589	135,360	
Contribution from WHO & UNICEF.	24,940	16,740	16,790	16,740	75,210	
Contribution from Chamber of Mines.	5,000	5,000	5,000	5,000	20,000	
C.D. & W. Assistance.	10,129	9,153	10,019	10,849	40,150	

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SWAZILAND.

MEDICAL SERVICES.

BILHARZIA CONTROL - £20,000.

Surveys have revealed that approximately 30% of the African population of Swaziland (i.e. 74,000 individuals) are affected with urinary bilharzia, and that approximately the same percentage of the inhabitants of the north east of Swaziland are affected by intestinal bilharzia.

2. Surveys also reveal that the incidence of the disease increases year by year from infancy till the 16-20 year old age group is reached, after which the incidence falls again. It is rare to find an African over 45 with signs of active disease, which seems to indicate that repeated infections produce a state of immunity.

3. In spite of the high incidence of the disease found in surveys, few signs of ill health attributable to bilharzia are seen in clinical medicine in Swaziland. During 1959, of the estimated 74,000 sufferers from urinary bilharzia, only 734 or 0.9% sought treatment. It is extremely difficult to say whether those afflicted with bilharzia suffer from mild general ill-health, debility and mental dullness, as suggested by some authorities, and careful work on this aspect of the matter is required.

4. The present position in Swaziland is therefore that bilharzia is widespread, but produces few obvious signs of ill-health in the African. The development of irrigation projects in Swaziland has, however, focussed attention on bilharzia, for in other parts of Africa these projects have often brought

about a dramatic increase in the incidence of bilharzia, even to the extent of causing the abandonment of the schemes. The irrigation projects in Swaziland are being carefully watched, because the present apparently innocuous type of disease may be due to a light load of infection, and should the irrigation schemes become overrun with infected vector snails, the load of infection may become considerably heavier, in which case the disease could assume a much more serious form.

5. Work on bilharzia by the Bilharzial Investigational Unit operated by the Medical Officer of Health, is at present therefore restricted to investigational measures (surveys of the incidence of infection, survey of the snail population, etc.). No definite control projects are at present being considered, as experience elsewhere has shown that none of the control methods, by the use of molluscicides, are really effective in conditions such as prevail in Swaziland, and that further a mere reduction of the snail population is insufficient to have any significant effect on the incidence of the disease in the population.

6. It may well be, however, that experiments now being conducted in other parts of the globe will lead to the discovery of a fully effective system of bilharzia control within the next five years. In such an event there would be an immediate demand for its application to Swaziland. Since the cost would in all probability be beyond the resources of the local budget it seems prudent to retain an amount of £20,000 out of the Territory's C.D. & W. allocation to permit the introduction of bilharzia control measures as and when required.

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SWAZILAND.

EDUCATION.

SCHOLARSHIPS FOR HIGHER EDUCATION:

APPLICATION FOR A FREE GRANT OF £21,050

Since South African Universities are virtually closed to Africans from the High Commission Territories, Swazis in search of higher education must enrol at either the Pius XII University College at Roma in Basutoland, at the University College of Rhodesia and Nyasaland at Salisbury, in Southern Rhodesia, or at United Kingdom Universities.

2. A number of scholarships tenable at the two former colleges are provided annually by the Territory itself from its own funds, and the C.D. & W. grant now sought will be used, with one exception, to provide scholarships tenable in the United Kingdom for courses of study not yet offered at Roma or Salisbury. The exception is a medical scholarship, tenable at the Durban Medical School, which was awarded in 1959 under the 1955 Act, and is now continued as an item in this scheme.

3. The sum of £21,050 includes an amount of £5,200 to provide more scholarships for short term training courses (principally of a technical nature) in the United Kingdom, as recommended by the Economic Survey Mission.

4. The following table sets out all scholarships proposed for 1960/64 whether financed by local revenues or C.D. & W. Funds:-

2/.....

TYPE OF SCHOLARSHIP.	SOURCE OF FUNDS.	NUMBER OF SCHOLARSHIPS BY YEAR				
		1960/ 61	1961/ 62	1962/ 63	1963/ 64	TOTAL
Teaching, commercial & General (at Salisbury or Roma)	Local Revenue.	6	6	6	6	24
Medical - U.K. & Durban.	C.D. & W.	2				2
Veterinary - U.K.	C.D. & W.	-	1	1	-	2
Short Term & Technical Courses U.K.	C.D. & W.	2	3	4	5	14
TOTAL.		10	10	11	11	42

ANNEXURE I.

FINANCIAL SUMMARY.

1.	Administering Authority	:	Swaziland.
2.	Allocation	:	Swaziland.
3.	Classification	:	Education.
4.	Description	:	Post Secondary Scholarships for African Students
5.	Total Cost	:	£15,850 plus £5,200 as recommended by the Economic Survey Mission.
6.	C.D. & W. Assistance required	:	£15,850 plus £5,200.
7.	Basis of Administration for Accounting Purposes		
	Capital		-
	Recurrent		£15,850 plus £5,200.
8.	Basis of Calculation of Claim:		100% of Recurrent Costs.

ANNEXURE II.

SCHOLARSHIPS - ESTIMATES OF EXPENDITURE.

SERVICE.	1960/61	1961/62	1962/63	1963/64	Total	NOTES.
A. C.D. & W. PROPOSALS.						
1. Medical Scholarship, Durban Medical School.	650	650	650	650	2,600	Continuation of Scholarship awarded in 1959 under the 1955 Act.
2. Medical Scholarship, United Kingdom.	750	600	600	600	2,550	
3. Two Veterinary Scholarships United Kingdom.	-	750	1,350	1,200	3,300	
4. Short Term Training Courses, United Kingdom.	1,850	1,850	1,850	1,850	7,400	
TOTAL C.D. & W. PROPOSALS.	3,250	3,850	4,450	4,300	15,850	
B. PROPOSALS BY ECONOMIC SURVEY MISSION.						
1. Short term training courses in United Kingdom.	-	800	1,750	2,650	5,200	
GRAND TOTAL	£3,250	4,650	6,200	6,950	21,050	

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SWAZILAND

EDUCATION.

EUROPEAN EDUCATION.

APPLICATION FOR A FREE GRANT OF £166,950.

The European population grew by over 80% (from 3,201 to 5,932) between 1946 and 1956. Between 1959 and 1965 the rate of growth is likely to continue owing to the settlement of some 300 families in the two sugar areas and in the Usutu Forests, and also to the steady growth of both Mbabane and Bremersdorp.

2. The aim of this scheme is to provide the buildings necessary to accommodate some 700 additional pupils, 250 of whom will attend school as boarders, between 1960 and the end of 1964. Net recurrent costs, as a result of this increase, will rise by nearly £35,000 and will form a charge against the local budget.

As education for European children is compulsory, Government is obliged to provide schooling for this increase.

ENROLMENT TRENDS.

3. On 30th September, 1958, a forecast of enrolments to 1965 was prepared. A revised forecast is given below:-

Enrolments at Government Maintained Schools.

Year.	As Estimated in 1958.	Revised Estimate 1960
1958	1,084 (actual)	1,084 (actual)
1959	1,184 (estimated)	1,163 (actual)
1960	1,284 "	1,272 (actual)
1961	1,384 "	1,374 (estimated)
1962	1,484 "	1,540 "
1963	1,574 "	1,680 "
1964	1,664 "	1,800 "
1965	1,754 "	1,960 "

4. The increase in the estimates for 1962-65 is due almost entirely to new developments in the Mhlambanyathi area where according to official information 170 new families are to be settled by the Usutu Pulp Company. This figure is higher than was expected.

5. Swaziland's educational policy is to concentrate secondary schooling at St. Mark's, Mbabane and at Evelyn Baring High School, Goedgegun. In other areas with concentrations of population, feeder primary schools are provided. At present such schools are in existence at Havelock Mine, Piggs Peak, Mhlambanyathi, Malkerns, Stegi, Bremersdorp and Mananga, while a small school is under construction at Big Bend. It is not proposed to erect any new schools.

6. Enrolments at present and forecast are:-

Name of School.	1960	1965
St. Mark's	451	570
Evelyn Baring.	331	375
Bremersdorp	182	365
Piggs Peak.	131	180
Havelock Mine.	90	110
Mhlambanyathi	28	210
Mananga	22	50
Stegi.	21	30
Malkerns.	16	30
Big Bend.	-	40
	1272	1960

7. Boarding Enrolments, present and forecast, are as follows:-

Name of School.	1960	1965.
St. Mark's	182	245
Evelyn Baring.	224	230
Piggs Peak.	45	85
Bremersdorp.	-	120
	451	680

3/.....

Detailed Notes on Individual Schools.

8. St. Mark's.

This School serves Mbabane as a primary school and the whole of the Central and Northern Areas as a secondary boarding school.

(i) Tuition: The tuition buildings are at present inadequate though some relief will be provided when four new classrooms, at present under construction, are completed. After the replacement of two dilapidated classrooms and the provision of ablution rooms, which are included in the draft loan estimates for 1960/61, the school will be able to accommodate in conventional classrooms approximately 470 pupils, against the rather conservative 1965 estimate of 570. For the additional 100 pupils provision is made for two more classrooms in 1960/61, and for two classrooms in 1963/64, while in 1961/62 provision is included for a library (£3,750) and a carpentry workshop (£2,000). The relatively high cost of the classrooms is due in large measure to the slope of the land.

(ii) Hostels: A new girls' hostel is under construction at present and will house 22 new boarders after absorbing ten at present accommodated in a nearby dwelling house loaned by Government for the purpose. Provision is made in this scheme for further extensions to one of the boys' hostels in 1962/63. At a cost of £15,000 it is proposed to provide 28 beds plus housemaster's quarters, ablution rooms, etc. The combined capacity of the hostels will then be 245 which is probably the maximum number which can be accommodated on the existing site.

9. Evelyn Baring School.

This School serves the whole of the Southern District and attracts boarders from many other parts of Swaziland as well.

(i) Tuition: As at St. Mark's, classroom accommodation is totally inadequate at the present time. Classes are taught in the staff room, in one of the hostels and in a room designed as a general store. Provision of £10,500 has therefore been included for a block of new classrooms and pupils' lavatories.

(ii) Hostels: A small hostel for very junior pupils has just been completed. No further provision is made since it is expected that the new hostel at Bremersdorp will cater for some of the country children who hitherto have enrolled at Evelyn Baring.

10. Bremersdorp School.

(i) Tuition: The enrolment at this school has grown by 80% in two years. This was only to be expected since Bremersdorp lies in the heart of the developing areas. A portable prefabricated classroom had to be despatched to the school post haste at the beginning of the 1960 school year to provide for the increase in numbers. There are at present seven conventional classrooms for eight groups totalling 182 pupils. The enrolment is expected to reach between 360 and 370 by 1965 and provision has been made in this scheme for:-

One classroom, a staff room, offices for the headmaster and a clerk, a storeroom and ablution rooms (1960/61).

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Two classrooms in 1961/62.

One classroom in 1962/63.

One classroom in 1963/64.

The school will then open in 1965 with 12 classrooms, an average of one for every 30 pupils.

(ii) Hostels: The need for a hostel has long been accepted by the Government. The proposal to build at Bremersdorp was supported by an independent committee appointed by the Resident Commissioner. The hostel will cater for primary school children from the sugar growing areas and from Malkerns and other areas in Central Swaziland. It has been designed to house 60 boys and 60 girls. Planning has reached an advanced stage and on the advice of the Public Works Department the sum of £92,500 has been included for this project in the scheme estimates. The building will be ready for occupation at the beginning of 1962, just in time to avert a serious accommodation crises.

11. District Schools.

I. Piggs Peak.

(i) Tuition: The enrolment of this school has grown steadily since it was established in 1948 with 18 pupils. There are now 131 and as at other schools the classroom accommodation is acute. A room within the hostel serves as a classroom by day and a dormitory by night. The enrolment at this school is expected to rise to 180 by 1965 and provision has been made for one new classroom in 1960/61 and one in 1963/64.

(ii) Hostels: The existing hostel designed to house forty, now holds forty-five. A small new hostel figures in the 1960/61 loan programme and no further provision is included in the current development plans.

II. Mhlambanyathi (i.e. Usutu Forests Area).

(i) Tuition: The existing two-classroom school caters adequately for the relatively small population in the Usutu Forests Area, but will be hopelessly inadequate to meet the needs of the 170 families being brought into the district by the Usutu Pulp Company. It appears likely that up to eight new classrooms will be needed during the next two and a half years, and it has been proposed to Usutu Pulp Company that half the capital cost (i.e. between £5,000 and £7,000) should be met by themselves. Provision of a similar amount (as Government's contribution) is included against the item District Schools in the years 1960/61 and 1961/62. It is proposed to enter into an agreement with the Company similar to that concluded recently between Government and the Swaziland Irrigation Scheme, whereby -

(a) the cost of the school building is shared equally;

(b) teachers' houses are provided by the Company and rented to Government; and

(c) recurrent costs remain the responsibility of Government.

It must be stressed that the school enrolment at Mhlambanyathi is likely to soar from 28 to over 200 during the next twenty-four months.

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(ii) Hostels: No hostels are required for this School.

III. Stegi School.

The existing building needs to be replaced, since it is some sixty years old and in a tumbledown condition. Provision is being included in the loan programme and no further provision will be needed.

IV. Big Bend School.

Big Bend School, to serve the Southern sugar growing area, is in the course of construction. Owing to lack of funds it was agreed that Ubombo Ranches should build the school (to plans and specifications approved by the Director of Public Works) and rent it to Government, who would be given a five year option to purchase at cost price less depreciation. Provision to permit the purchase in 1962/63 has been included in the estimates.

V. Mananga School.

Mananga School, which serves the Northern sugar growing areas, has just been completed. The school opened with an enrolment of 22, and it is expected that one more classroom will be necessary before 1965.

Summary : District Schools Item.

	1960/61	1961/62	1962/63	1963/64	Total.
Piggs Peak - Classrooms.	1,750	-	-	1,750	3,500
Mhlambanyathi - Half Cost of New School.	3,000	4,000	-	-	7,000
Big Bend School Purchase.	-	-	3,000	-	3,000
Mananga School.	-	-	-	1,750	1,750
	4,750	4,000	3,000	3,500	15,250

8/.....

Note on Recurrent Costs.

12. The present teaching establishment of 66 is expected to increase to 86 by 1965. The teachers' salary bill, which forms the major part of the recurrent costs, will as in the past be borne by the local Government. Other items of recurrent cost, which will be borne by the local budget, include books and stationery (not a significant sum) and hostel maintenance, practically all of which is recovered in fees.

Note on Estimates.

13. While every care has been taken in compiling the attached estimates, the impossibility of forecasting with complete accuracy the cost of buildings to be erected three years hence must be stated and accepted.

14. **Arrangements for the execution and Technical Supervision of Capital Works.**

A. **The Bremersdorp Hostel Project.**

Design: P.W.D. Architect (M.I.A.)
Consulting Structural Engineer } Johannesburg private practitioners briefed by P.W.D. to assist.
Consulting Electrical Engineer }

Quantity Surveyor: Consulting Quantity Surveyors (Johannesburg private practitioners) will be briefed for Bills of Quantities in direct liaison with P.W.D. Their brief does of course include settlement of the Final Account.

Tenders: Tenders will be by general invitation in the Swaziland and Union (Transvaal) press. (The lowest or any tender not necessarily accepted).

9/.....

Contract: Form of Contract will be the Standard form approved and recommended by the Institute of South African Architects, the Chapter of South African Quantity Surveyors and the National Federation of Building Grade Employers in South Africa, as adapted for use by Swaziland Government.

Supervision: The Contract will be supervised by the P.W.D. Quantity Surveyor(M.C.Q.S., A.R.I.C.S), the P.W.D. Architect (M.I.A.) and a Clerk of Works of the Building Branch staff.

B. Other Buildings.

These in all probability will be undertaken departmentally by the P.W.D. Design will be in the hands of the P.W.D. Architect (M.I.A.) and the work supervised by the P.W.D. Quantity Surveyor (M.C.Q.S., A.R.I.C.S), the P.W.D. Architect (M.I.A.) and a Clerk of Works of the Building Branch staff.

APPENDIX I.

FINANCIAL SUMMARY.

1.	Administering Authority	: Swaziland.
2.	Allocation	: Swaziland.
3.	Classification	: Education.
4.	Description	: Extension of Education Facilities for European Children.
5.	Total Cost	: £166,950
6.	C.D. & W. Assistance Required:	: £166,950.
7.	Basis of Administration for Accounting Purposes	:
	Capital	£166,950.
8.	Basis of Calculation of Claim:	: 100% of Capital Costs.

APPENDIX II.

EXTENSION OF EDUCATIONAL FACILITIES FOR EUROPEAN CHILDREN.

ESTIMATES OF EXPENDITURE.

	1960/61	1961/62	1962/63	1963/64	TOTAL.
CAPITAL.					
1. New Hostel - Bremersdorp School.	70,000	22,500	-	-	92,500
2. Completion of Tuition Block, Bremersdorp School.	6,000	4,500	1,500	1,500	13,500
3. Extensions to Tuition Block - Evelyn Baring School.	5,250	5,250	-	-	10,500
4. Extensions to Tuition Block - St.Mark's School.	4,000	5,750	-	4,000	13,750
5. Extensions to Boys' Hostel - St.Mark's School.	-	-	15,000	-	15,000
6. District Schools.	4,750	4,000	3,000	3,500	15,250
7. Furniture & Equipment for Schools and Hostels.	1,000	3,750	900	800	6,450
TOTAL	91,000	45,750	20,400	9,800	£166,950

SWAZILAND.

EDUCATION.

EURAFRICAN SCHOOLS.

APPLICATION FOR A FREE GRANT OF £35,000.

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The Eurafrican population is widely scattered and relatively small, numbering about 2,500 people.

2. The group is far from homogeneous and comrprises a wide range of types supporting varying material and cultural standards, but from the more stable elements there has emerged in recent years clear evidence of aspirations tending towards greater solidarity, and ambitions for the progress and welfare of the community.

3. The Central Advisory Committee on Eurafrican Education last year appointed a sub-committee to study the question of introducing compulsory education for Eurafrican children. The sub-committee's report recommended that at the present time this would not be practicable but Government was urged to provide the necessary facilities, including more hostel accommodation and a greater number of boarding bursaries, to make it possible for all Eurafrican children to attend Eurafrican Schools.

4. A detailed survey made by the sub-committee reveals the following position (January, 1959):-

No. of children at Eurafrican Schools	550
No. of Eurafrican children at African Schools.	50
No. of Eurafrican children of school age not attending any school.	40

5. On the basis of these figures, therefore, the Eurafrican population of school age was 640, and is likely to increase to 810 by 1965.

2/.....

6. As stated earlier in this memorandum the community is very scattered, and the number who would have to attend school as boarders is therefore high. During the past three years the boarder population has ranged between 56% and 65% of the whole, and no material change can be expected.

7. The school enrolment has grown steadily from 340 in 1955 to 418 in 1957 and 553 in 1959. The number in the Secondary classes has increased from 16 to 60 over the same period. From a recent survey it would appear that by 1965 there will be approximately 670 and 140 children in the Primary and Secondary classes, respectively.

8. The educational needs of the community are at present being met by five grant-aided schools, three with boarding establishments. The present and estimated future enrolments at these schools are:-

SCHOOL.	Actual 1959.		Capacity of existing hostels.	Estimated 1965.	
	Total Enrolment.	Boarders.		Enrolment.	Boarders.
St.Michael's (Bremersdorp)	140	90	105	250	160
Lady of Sorrows (Hluti)	203	155	155	280	200
Florence (Hluti)	125	90	90	150	120
Stegi Schl.	60	-	-	85	-
Mbabane Schl.	25	-	-	45	-
TOTAL.	553	335	350	810	480

9. To cater for this growth in enrolment it will be necessary to provide seven new classrooms and hostel accommodation for 130 more boarders. The needs of each school are listed below:-

3/.....

(i) ST. MICHAEL'S SCHOOL. (Present enrolment is 140, with 90 boarders. Estimated 1965 enrolment is 250 with 160 boarders).

(a) A Dining Hall - Kitchen Block is required. Its provision will release a dormitory, presently employed as a dining hall, for more conventional use. It is proposed to make a grant of £6,000 for this purpose.

(b) The existing hostels will have to be enlarged by the addition of two more dormitories and a proper ablution room, and for this grants of £2,000 are proposed.

(c) The Tuition Block will have to be extended by the addition of three classrooms for which grants totalling £1,800 are proposed

(ii) LADY OF SORROWS SCHOOL. (Present enrolment is 203 with 155 boarders. Estimated 1965 enrolment is 260 with 200 boarders).

(a) Hostel accommodation would be needed for 45 more boarders and for the rehousing of 60 boarders who live in a basement below the classrooms which was designed originally as a woodwork shop and which is very urgently needed for tuition purposes. A grant of £8,000 is proposed for this purpose.

(b) Additional classrooms (£1,800) would also be needed to take the increased enrolment, as all the existing classrooms are full.

4/.....

(iii) FLORENCE SCHOOL. (Present enrolment is 125 with 90 boarders. The 1965 enrolment is estimated at 150 with 120 boarders).

(a) A new hostel for girls is needed as the two existing dormitories are full to capacity. To provide some relief in this quarters, and to allow of an increase of 30 boarders, a grant of £5,000 will be needed.

(iv) STEGI SCHOOL. (Present enrolment 60. The 1965 enrolment is estimated at 85).
This three-teacher day school is housed in two classrooms and a nearby Church. A new classroom (£600) will be needed if the demand for schooling in this area is to be met.

(v) MBABANE SCHOOL. (Present enrolment is 25. Estimated 1965 enrolment is 45).
This recently established one-teacher Primary School serves the Eurafrican community living at Fonteyn, near Mbabane. More accommodation (£400) will be needed by 1961.

10. Finally, provision of £2,400 has been made for the purchase of basic classroom and hostel furniture and equipment.

11. RECURRENT COSTS which, as in the past, will be met from the local revenue, are likely to grow as follows:-

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	BUDGETARY.				ESTIMATED.		
	1958/59	1959/60	1960/1	1961/2	1962/3	1963/4	1964/5
Salary Grants in Aid.-	4,765	5,550	7,730	8,600	9,700	11,000	12,500
Books & Stationery.Grants	675	765	900	950	1,000	1,100	1,200
Hostel Subsidies	960	960	960	1,200	1,200	1,200	1,200
Boarding Bursaries.	650	750	1,000	1,100	1,300	1,500	1,700
TOTAL	7,050	8,025	10,590	11,850	13,200	14,800	16,600

GENERAL NOTES ON EURAFRICAN SCHOOLS.

12. Tuition is free, and Government makes book/stationery grants of 30/- for each pupil on the roll. Hostel fees range from £15 to £24 per annum and provision is included in the Territorial estimates for assistance, by means of boarding bursaries, in necessitous cases.

13. St. Michael's and Our Lady of Sorrows Schools conduct classes to the Junior Certificate level. Florence School has classes to Standard VII, Stegi to Standard VI and the Mbabane School to Standard II.

ECONOMIC SURVEY MISSION.

14. This scheme was submitted to the Economic Survey Mission who judged it to be inadequate and they recommended expenditure of a further £7,000 on building and equipment grants. The estimates include this figure. There can be little doubt that the Mission were correct in their judgment. Included in the extra £7,000 is provision for laboratory grants, which had been omitted from the original scheme, and for more generous grants for the new hostel buildings at St. Michael's and Lady of Sorrows.

APPENDIX I.

FINANCIAL SUMMARY.

1. Administering Authority	:	Swaziland.
2. Allocation	:	Swaziland.
3. Classification	:	Education.
4. Description.	:	Development of Eurafrican Schools.
5. Total Cost	:	£28,000 plus £7,000 recommended by the Economic Survey Mission (Total = £35,000).
6. C.D. & W. Assistance required	:	Grant of £28,000 + £7,000 (Total = £35,000).
7. Basis of Administration for Accounting Purposes :		
Capital		£28,000 + £7,000 (£35,000)
8. Basis of Calculation of Claim:		100% of Capital Cost.

APPENDIX II.

FURTHER DEVELOPMENT OF EURAFRICAN EDUCATION.

	1960/61	1961/62	1962/63	1963/64	TOTAL
CAPITAL.					
A. St. Michael's School, Bremersdorp.					
1. New Dining Hall & Kitchen Block.	3,000	3,000	-	-	6,000
2. Extensions to Hostel Blgds.	1,000	-	1,000	-	2,000
3. Extensions to Tuition Bldg.	-	600	600	600	1,800
B. Lady of Sorrows School - Hluti					
4. New Hostel.	-	4,000	4,000	-	8,000
5. Extensions, Tuition Block.	-	600	600	600	1,800
C. Florence School - Hluti					
6. Additional Hostel Accommodation.	-	2,000	3,000	-	5,000
D. Stegi School.					
7. New Classrooms.	-	600	-	-	600
E. Mbabane School.					
8. Extensions to Tuition Blg.	400	-	-	-	400
F. General.					
9. Furniture & Equipment Grants.	500	1,200	600	100	2,400
TOTAL ORIGINAL SCHEME.	4,900	12,000	9,800	1,300	28,000

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	1960/61	1961/62	1962/63	1963/64	TOTAL.
ADDITIONAL ITEMS PROPOSED BY ECONOMIC SURVEY MISSION.					
CAPITAL.					
A. St. Michael's School.					
10. Further extensions to Dormitory Block.	-	1,000	-	-	1,000
11. Additional grant for Laboratory.	-	-	900	-	900
B. Lady of Sorrows School					
12. Additional grant for new Hostel.	-	-	1,000	-	1,000
13. Additional grant for Laboratory.	-	-	-	900	900
C. Florence School.					
14. New Classrooms & Laboratory.	600	900	-	-	1,500
D. Stegi School.					
15. One additional Classroom.	-	-	-	600	600
E. Mbabane School.					
16. Additional grant for extensions to Tuition Building.	-	500	-	-	500
F. General.					
17. Further Furniture & Equipment grants.	150	150	150	150	600
TOTAL ECONOMIC MISSION.	750	2,550	2,050	1,650	7,000
GRAND TOTAL.	5,650	14,550	11,850	2,950	35,000

SWAZILAND

EDUCATION.

AFRICAN TEACHER TRAINING CENTRE.

APPLICATION FOR A FREE GRANT OF £110,000.

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THE NEED FOR A TEACHER TRAINING CENTRE.

The African Primary School structure is growing at a very rapid rate. Actual and estimated figures for the period 1952 - 1965 are shown below:-

	Year.	Primary School Enrolment.	No. of Teachers.
Actual	1952	15,487	447
	1954	17,834	488
	1956	24,461	643
	1958	28,411	767
	1960	33,000	900
Estimated.	1962	39,000	1,050
	1965	46,000	1,250

2. The meagre teacher training facilities in Swaziland have been unable to keep pace with the demands of the Primary Schools, which require approximately ninety trained recruits annually to fill new posts and to replace those who leave on marriage and for other reasons.

3. There are at present three small centres operating in Swaziland. One is conducted by the Church of the Nazarene at Bremersdorp and produces approximately 25 trained teachers each year. One is conducted by Government at Mataphe and turns out some 15 teachers annually. The third (for Domestic Science Teachers) is conducted at Mbuluzi by the South Africa General Mission and trains three to four teachers per annum. Finally, as there are no local facilities, between 6 and 8 students are sent to Basutoland each year to train at the Higher Primary Level. All in all, therefore, some fifty teachers are trained annually at three local centres and in Basutoland. This number represents less than 60% of the demand, and

in the Union of South Africa, while the number of untrained teachers is increasing steadily.

4. Quite apart from the needs of the primary schools, which are indeed pressing, it might be stressed that the teaching profession absorbs more educated Africans than all other departments of Government combined and the need for providing adequate training facilities for this very important avenue of skilled employment does not require to be emphasised.

DETAILS OF THE SCHEME.

5. It is proposed to close the small Government Centre at Matapha (which was established as an appendage of the Swazi National High School in the early 1950's at a cost of £10,000, vide Colonial Development and Welfare Scheme D.1618) and to use the buildings for clerical training, which is dealt with in another scheme. A new Government Centre will be erected at Bremersdorp capable of training from 60 to 70 teachers per annum. It is not proposed to interfere with the two Mission centres at Bremersdorp and Mbuluzi, which between them will continue to train approximately 30 teachers annually.

6. The new Government Centre will provide training at both the Primary Lower and Primary Higher levels. "Primary Lower" teachers are trained to teach up to the fourth standard, and this type of training is offered at both the existing centres. "Primary Higher" teachers are trained to teach the higher primary classes (Standards V and VI) of which increasing numbers are being established in Swaziland. As mentioned earlier in this memorandum, there are no primary higher training facilities available in Swaziland at the present time.

7. A site at Bremersdorp has been selected, and surveyed in consultation with the Government Architect and Quantity

Surveyor, and sketch plans of the various buildings have been drawn by an Architect commissioned by the Director of Public Works. On the basis of these plans, the Public Works Department have submitted the following preliminary estimate:-

Accommodation and Fees	£89,000
Development of Site and Services (approximate)	4,000
Staff Housing	11,000
	£104,000

8. In addition a sum of £6,000 will be needed for basic furniture and equipment, and for a light vehicle. The total capital cost, therefore, is estimated at £110,000.

9. If this application is approved, the annual output of primary school teachers will grow as follows: (As all courses are of two years' duration, the number in training will be double the annual output).

Centre.	Annual Output. 1959.	1964.
Government Centre.		
Primary Lower	15	40
Primary Higher	-	25
Nazarene Centre.		
Primary Lower	25	25
Mbuluzi Centre.		
Domestic Science Teachers	4	4
Basutoland Centres.	6	-
Totals	50	94
Number of Students in Training	100	188

10. The proposed new centre will comprise two residences for men and women students, a tuition block, a dining hall, administrative offices a laundry and storeroom, together with staff houses and accommodation for servants. Electric

current/...4.

current and water will come from the Bremersdorp town supplies.

11. DETAILS OF BUILDINGS, ETC.

(a) The Tuition Block will comprise four lecture rooms, a library, a general purposes room, a carpentry shop, and toilets.

(b) Each residence will comprise eight dormitories, ablution rooms, staff quarters and a study room.

(c) The Dining Hall Block will include kitchens, store-rooms and a cold room.

(d) The Administrative Wing includes offices for the Principal and his Clerk, and a stationary store as well as a general staff room and toilets.

(e) Housing. The staff will comprise eight, including the Principal, his Clerk and a Matron. Apart from those accommodated within the mens' and women's residences, four (one Division I officer, two Division II and one Division II) will be accommodated in detached houses.

(f) Furniture, Basic Equipment and Vehicle. As the Centre will be sited about one mile from the Bremersdorp Station, post office and shopping centre, a light vehicle (£925) will be essential. In addition £5,000 will be needed to furnish and equip the two hostels (£1,800), the lecture rooms (£900), the dining hall (£600), the kitchen including a basic issue of cutlery, crockery, etc. (£400), the offices and staff room (£250), the carpentry shop (£300), to provide two typewriters, cyclostyling machine, and projector (£470), as well as miscellaneous equipment such as garden tools, a lawn mower, etc.

12. PRACTICE TEACHING.

The Centre will be situated within easy walking distance of five primary schools which can be used for practice teaching.

13. RECURRENT COSTS.

The new Centre will open in February, 1962. Recurrent costs will rise from approximately £1,800 in 1961/62 to nearly £11,000 in 1964/65. Recurrent costs will be met by the Territorial Government. In this connection it should be pointed out that £2,000 per annum, which is being spent now on the Matapha Centre, will be saved, while fees, which it is proposed be £15 per annum, will produce an estimated £150 in 1961/62, £900 in 1962/63, £1,350 in 1963/64 and £1,875 in 1964/65.

14. THE ECONOMIC SURVEY MISSION.

This application received strong support from the Mission.

15. ARRANGEMENTS FOR EXECUTION AND TECHNICAL SUPERVISION OF CAPITAL WORKS.

(a) Design: A. Gordon Ellis, M.B.E., A.R.I.B.A. A.A.Dipl., M.I.A., Chartered Architect (Private Practitioner).

(b) Quantity Surveyor: Consulting Quantity Surveyors (Johannesburg Private Practitioners) will be briefed for Bills of Quantities. Their brief would include settlement of the final account.

(c) Tenders: Tenders will be by general invitation in the Swaziland and Union (Transvaal) press. (The lowest or any tender not necessarily accepted).

(d) Contract: Form of Contract will be the Standard form approved and recommended by the Institute of South African Architects, the Chapter of South African Quantity Surveyors and the

National Federation of Building Trade Employers in South Africa, as adapted for use by Swaziland Government.

(e) Supervision:

The Contract will be supervised by the P.W.D. Quantity Surveyor (M.C.Q.S., A.R.I.C.S.), the P.W.D. Architect (M.I.A.) and a Clerk of Works of the Buildings Branch staff.

APPENDIX I.

FINANCIAL SUMMARY.

1.	Administering Authority:	Swaziland.
2.	Allocation:	Swaziland.
3.	Classification:	Education.
4.	Description:	Establishment of an African Teacher Training Centre.
5.	Total Cost:	£110,000.
6.	Colonial Development and Welfare Assistance Required:	Grant of £110,000.
7.	Basis of Administration for Accounting Purposes:	
	Capital	£110,000.
8.	Basis of Calculation of Claim:	100% of Capital Cost.

ESTABLISHMENT OF AFRICAN TEACHER TRAINING CENTRE.

ESTIMATES OF EXPENDITURE.

CAPITAL (for which a Colonial Development and Welfare Fund Grant is required).

	1960/61	1961/62	TOTAL
Accommodation and Fees	40,000	49,000	89,000
Development of Site and Services	4,000	-	4,000
Staff Housing	-	11,000	11,000
Furniture, equipment and light vehicle	-	6,000	6,000
TOTAL	44,000	66,000	110,000

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S W A Z I L A N D.

EDUCATION.

SWAZI NATIONAL HIGH SCHOOL AT MATAPHA.

APPLICATION FOR A FREE GRANT OF £28,300.

The Swazi National School is the Territory's premier African High School. It is situated at Matapha, five miles from Bremersdorp and caters for post Primary pupils only.

2. In 1958 and 1959 the enrolments were as follows:-

	1958	1959.
First Form	36	40
Second Form.	30	45
Third Form.	30	20
Fourth Form.	8	25
Fifth Form	6	6
	110	136

The School is now full to capacity.

3. Public examinations are written at the Third and Fifth Form levels, and the School has obtained very good results in recent years.

4. Situated in the country, enrolment has been limited by the capacity of the hostels. Twenty applications for admission in 1959 had to be rejected owing to shortage of hostel accommodation. The existing classroom accommodation, too, is inadequate, while the very humble laboratory does not measure up to modern requirements.

5. The aim of this scheme is to provide the facilities for 270 students by 1965, distributed as follows:-

2/.....

First Form (two groups of 35)		70
Second Form (" " " 35)		70
Third Form (" " " 30)		60
Fourth Form (" " 20)		40
Fifth Form (one group)		30
	TOTAL	270

6. To provide for this increase, the following new buildings will be needed:

Three classrooms.
One laboratory.
Additional Hostel accommodation for 50 male and 30 female students.
The Dining Hall/Kitchen block would have to be enlarged.
Accommodation will be needed for four more staff members, for two of whom detached houses will be built, the remaining two to occupy quarters which will be incorporated into the new boys' and girls' hostels.

Provision would have to be made for basic furniture and equipment, as well as for water and electric light installations.

7. Capital costs, details of which appear in the attached estimates, total £56,600 and will be borne by the Colonial Development and Welfare Fund and the Swazi National Treasury on a 50 : 50 basis.

8. Recurrent Costs of maintaining the Swazi National High School are the responsibility of the Swazi National Treasury. These costs at present approximately £12,000 per annum, are likely to grow by a further £8,000 to £9,000 during the development period. Revenue from fees will increase by approximately £2,000 per annum over the same period, so that the nett additional burden for the National Treasury will be £6,000 to £7,000 per annum.

9. ARRANGEMENTS FOR THE EXECUTION AND TECHNICAL SUPERVISION OF CAPITAL WORKS.

Projects other than the Boys' and Girls' Hostels.

These will be undertaken departmentally by the Public Works Department.

3/.....

For the Boys' and Girls' Hostels.

Design: P.W.D. Architect (M.I.A.)
Consulting Structural Engineer)
Consulting Electrical Engineer) Johannesburg private practitioners briefed by P.W.D. to assist.

Quantity Surveyor: Consulting Quantity Surveyors (Johannesburg private practitioners) will be briefed for Bills of Quantities in direct liaison with P.W.D. Their brief does of course include settlement of the Final Account.

Tenders: Tenders will be by general invitation in the Swaziland and Union (Transvaal) press. (The lowest or any tender not necessarily accepted).

Contract: Form of Contract will be the Standard form approved and recommended by the Institute of South African Architects, the Chapter of South African Quantity Surveyors and the National Federation of Building Trade Employers in South Africa, as adapted for use by Swaziland Government.

Supervision: The Contract will be supervised by the P.W.D. Quantity Surveyor (M.C.Q.S., A.R.I.C.S), the P.W.D. Architect (M.I.A.) and a Clerk of Works of the Building Branch staff.

APPENDIX I.

FINANCIAL SUMMARY.

1.	Administering Authority	: Swaziland.
2.	Allocation	: Swaziland.
3.	Classification	: Education.
4.	Description	: Development of Swazi National High School.
5.	Total Cost	: £56,600
6.	Assistance Required from C.D. & W.	: £28,300.
7.	Basis of Administration for Accounting Purposes	:
	Capital	£56,600
	Recurrent	-
8.	Basis of Calculation of Claim.	50% of Total Cost

APPENDIX II.

DEVELOPMENT OF SWAZI NATIONAL HIGH SCHOOL.

	1960/61	1961/62	1962/63	1963/64	TOTAL
CAPITAL.					
Tuition Block.	5,500	3,000	-	-	8,500
New Boys' Hostel.	8,000	11,000	-	-	19,000
New Wing to Girls' Hostel	-	-	10,000	-	10,000
Extension to Dining Hall & Kitchen.	-	5,000	-	-	5,000
Staff Houses, including furniture.	-	-	3,800	3,800	7,600
School & Hostel furniture & Equipment.	400	1,200	900	-	2,500
Electric Light & Water Reticulation.	-	4,000	-	-	4,000
TOTAL	13,900	24,200	14,700	3,800	56,600
DEDUCT SHARE OF SWAZI NATIONAL TREASURY.	6,950	12,100	7,350	1,900	28,300
C.D. & W. CONTRIBUTION.	6,950	12,100	7,350	1,900	28,300

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SWAZILAND.

EDUCATION.

CLERICAL TRAINING.

APPLICATION FOR A FREE GRANT OF £12,046.

After discussions with the Economic Survey Mission about vocational training, it was decided to seek funds for the establishment of a training centre for clerks.

2. There are many openings for African Clerks, both in Government Service and with numerous industrial and commercial concerns, but there are no training facilities.

SCOPE OF THE TRAINING PROPOSED

3. It is intended to offer a two-year course of training post Junior Certificate. Later, as more matriculants become available, the entrance qualification will probably be Matriculation or School Leaving Certificate.

4. The course will include instruction in English, commercial arithmetic, typing, filing systems, business correspondence, bookkeeping and financial records, the use of a typical office telephone exchange and the dictaphone. Whether or not shorthand is to be included will be for consideration at a later date.

5. The annual intake will be between 15 and 18 students.

ACCOMMODATION.

6. When the new Teacher Training Centre (which forms the subject of a separate scheme) has been built, the existing Teacher Training Centre at the

Swazi National High School will house the proposed clerical course. The attached estimates therefore include only provision for housing, personal emoluments, furniture and equipment, costs of training and other small miscellaneous items.

Appendix I.

FINANCIAL SUMMARY.

1.	Administering Authority	:	Swaziland.
2.	Allocation	:	Swaziland.
3.	Classific ation	:	Education.
4.	Description	:	Clerical Training for Africans.
5.	Total Cost	:	£12,046.
6.	Assistance Required	:	(Economic Mission Proposal). £12,046.
7.	Basis of Administration for Accounting Purposes:		
	Capital		£7,800
	Recurrent		£4,246.
8.	Basis of Calculation of Claim	:	100% of Total Cost.

Appendix II.

CLERICAL TRAINING - NEW SCHEME.

	1960/61	1961/62	1962/63	1963/64	TOTAL.	NOTES.
A. CAPITAL.						
1. Two Staff Houses.	-	3,600	-	3,000	6,600	Buildings will be available at Matapha once teacher training course has been moved to new centre.
2. Furniture & Equipment Tuiton Block	-	500	500	200	1,200	
TOTAL CAPITAL.	-	4,100	500	3,200	7,800	
B. PERSONAL EMOLUMENTS.						Dormitory accommodation also available. Boarding fees will be payable to Swazi National Treasury and students will form part of the student body of the Swazi National High School
3. Instructor-in-charge.	-	262	1,088	1,136	2,486	
4. Assistant Instructor.	-	-	-	600	600	
TOTAL PERSONAL EMOLUMENTS.	-	262	1,088	1,736	3,086	
C. OTHER CHARGES.						
5. Training Costs	-	100	300	300	700	
6. Travelling.	-	60	100	100	260	
7. Miscellaneous & Contingencies.	-	50	75	75	200	
TOTAL OTHER CHARGES.	-	210	475	475	1,160	
TOTAL SCHEME	-	4,572	2,063	5,411	12,046	

S W A Z I L A N D.

EDUCATION.

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AFRICAN PRIMARY AND SECONDARY EDUCATION.

APPLICATION FOR A FREE GRANT OF £146,281.

Although the enrolment at Primary and Secondary Schools increased by nearly 50% between 1955 and 1959 only 55% of school age children were at school by 1959. Indications are that there are now (February, 1960), 34,000 children at school, but 700 had to be turned away at the beginning of the year for lack of accommodation.

2. The following table sets out enrolment figures between the years 1946 and 1965.

...	(a)	(b)	(c)	(d)
YEAR.	TOTAL SWAZI POPULATION.	ESTIMATED NUMBER OF CHILDREN OF SCHOOL-GOING AGE.	ENROLMENT.	% OF (c) TO (b)
1946	181,260 (by census)	40,230	10,970 (actual)	27%
1956	234,500 (by census)	53,180	24,832 (actual)	46%
1957	239,500 (estimated)	54,000	26,457 (actual)	49%
1958	244,500 (estimated)	55,000	29,066 (actual)	53%
1959	250,000	56,250	31,217 (actual)	55%
1960	255,000	57,375	34,000 (estimated)	59%
1965	280,000	63,000	48,500 (estimated)	77%

3. The aim of the scheme is to provide places in the schools for 48,500 pupils by 1965 - an increase of 14,500 on today's figure.

4. The increase is largely accounted for by the fact that more pupils are staying longer at school. The following

table shows this trend:-

ENROLMENTS 1956, 1959 AND 1960.

	1956	1959	1960	INCREASE 1956-60.	INCREASE % 1956-60.	ESTIMATE 1965.
PRIMARY.						
Substandards	13,999	14,505	15,000	1,001	7%	17,500
Stds.I to IV	8,635	13,264	14,800	6,165	71%	21,000
Stds.V and VI	1,718	2,643	3,200	1,482	86%	7,500
TOTAL PRIMARY	24,352	30,412	33,000	8,648	35%	46,000
SECONDARY CLASSES.	480	805	1,010	530	110%	2,500
TOTAL PRIMARY & SECONDARY.	24,832	31,217	34,010	9,178	37%	48,500

5. There are 280 African Schools in Swaziland:-

3 High Schools (Matriculation top).

4 Junior Secondary Schools (Junior Certificate top).

5 Schools being developed to Junior Secondary status.

48 Higher Primary Schools offering the full eight year primary course.

220 Lower Primary Schools with top classes ranging from Standard II to Standard IV.

6. This development scheme includes provision for:

(a) doubling the capacity of two High Schools (the third, the Swazi National School. forms the subject of a separate scheme);

(b) increasing the number of Junior Secondary Schools from nine to fifteen;

(c) upgrading 27 Lower Primary Schools to full Higher Primary status;

(d) the enlargement of 50 Lower Primary Schools to permit increased enrolments.

3/....

7. For these purposes 180 classrooms and six laboratories will have to be built at Voluntary Agency Schools for which building and furniture and equipment grants of £240 (classroom) and £660 (Laboratories) will be made; and forty-five new classrooms will be required at Government Schools, where costs per classroom including furniture average £360.

8. In addition, provision is included for the extension of school hostels at selected Voluntary Agency Schools (£30,000) and for a new hostel at the Government Junior Secondary School at Hlatikulu (£21,000). At the present time there are only 925 beds available in hostels at African Schools. The provision included in this scheme will increase the number of beds to 1,300.

9. The above developments will call for an increase in the inspectorate, and provision is therefore included for one Education Officer. This will bring the establishment to five.

10. The scheme, as outlined above, was placed before the Economic Survey Mission who commented as follows:-

(a) An additional £12,000 should be added for building grants.

(b) The scheme as a whole did not go far enough.

11. The scheme estimates have therefore been extended to include additional capital grants for classrooms, equipment and school hostels, while a second post of education officer, together with housing, has been included.

12. The effect of these proposals will be to provide 20 additional classrooms and two additional laboratories at Voluntary Agency Schools: to provide 50 additional beds in Voluntary Agency School hostels: and to provide a further ten classrooms at Government maintained schools. The cost of these proposals including the second education officer's post, totals £23,268.

13. It must be stated that the 1960 enrolments are such as to justify completely the view of the Economic Mission that the scheme as originally drafted would fall short of requirements.

NOTE ON RECURRENT COSTS.

14. The scheme, as outlined above, including the additions proposed by the Economic Mission, will involve the Territory in increased expenditure on teachers' salaries and salary grants in aid. These two items have been responsible for annual increases of some £15,000 in the Territorial budget over the past few years. The continuation of this trend is accepted and the necessary provision will be made in the local budget in succeeding years.

ARRANGEMENTS FOR THE EXECUTION AND TECHNICAL SUPERVISION OF CAPITAL WORKS.

15. The only project of any magnitude is the new hostel at Hlatikulu.

Design: P.W.D. Architect (M.I.A.).
Consulting Structural Engineer) Johannesburg
Consulting Electrical Engineer) private practitioners briefed by P.W.D. to assist.

Quantity Surveyor: Consulting Quantity Surveyors (Johannesburg private practitioners) will be briefed for Bills of Quantities in direct liaison with P.W.D. Their brief does of course include settlement of the Final Account.

Tenders: Tenders will be by general invitation in the Swaziland and Union (Transvaal) press. (The lowest or any tender not necessarily accepted).

Contract: Form of Contract will be the Standard form approved and recommended by the Institute of South African Architects, the Chapter of South African Quantity Surveyors and the National Federation of Building Trade Employers in South Africa, as adapted for use by Swaziland Government.

Supervision: The Contract will be supervised by the P.W.D. Quantity Surveyor (M.C.Q.S., A.R.I.C.S.), the P.W.D. Architect (M.I.A.) and a Clerk of Works of the Building Branch staff.

FINANCIAL SUMMARY.

1. Administrative Authority: Swaziland.

2. Allocation: Swaziland.

3. Classification: Education.

4. Description: Extension of Primary and Secondary Education for Africans.

5. Total Cost: £125,150 plus £23,268 recommended by the Economic Mission. (Total = £148,418).

6. Basis of Administration for Accounting Purposes:

	Capital.	Recurrent.	Total.
Original Scheme	£119,600	5,550	125,150
Proposed by Economic Survey Mission	19,140	4,128	23,268
TOTAL	£138,740	£7,541	£148,418

7. Basis of Calculation of Claim: where Grant does not provide for 100% of cost.

	£
100% of capital	138,740
Recurrent on sliding scale 100% in 1960/61, 75% in 1961/62, 50% in 1962/63 and 25% in 1963/64	7,541
	£146,281

APPENDIX II

AFRICAN PRIMARY AND SECONDARY EDUCATION.

ESTIMATES OF EXPENDITURE.

	1960/61	1961/62	1962/63	1963/64	1964/65	TOTAL
1. CAPITAL.						
C.D.& W. Proposals.						
(a) Grant Aided Voluntary Agency Schools.						
(i) Building Grants, Classrooms and Laboratories	9,650	9,650	9,650	9,650	-	38,600
(ii) Furniture and Equipment Grants	2,400	2,400	2,400	2,400	-	9,600
(iii) Extensions to School Hostels	7,500	7,500	7,500	7,500	-	30,000
(b) Government Maintained Schools.						
(i) New Classrooms	3,250	3,250	3,250	3,250	-	13,000
(ii) Classroom Furniture and Equipment	800	800	800	800	-	3,200
(iii) New Hostel - Hlatikulu	-	10,000	10,000	-	-	20,000
(iv) Hostel Furniture and Equipment	-	-	1,000	200	-	1,200
(c) Housing.	4,000	-	-	-	-	4,000
TOTAL CAPITAL	27,600	33,600	34,600	23,800	-	119,600
2. RECURRENT.						
(d) Personal Emoluments - Education Officer	1,000	1,045	1,090	1,135	-	4,270
(e) Travelling & Subsistence - Education Officer	320	320	320	320	-	1,280
TOTAL RECURRENT	1,320	1,365	1,410	1,455	-	5,550
TAL C.D. & W. SCHEME	28,920	34,965	36,010	25,255	-	£125,150
LOCAL CONTRIBUTION		341	705	1,091	-	2,137
TOTAL GRANT	28,920	34,624	35,305	24,164	-	£123,013

	1960/61	1961/62	1962/63	1963/64	TOTAL	REMARKS.
Add Proposals by Economic Mission.						
1. CAPITAL.						
(a) Grant Aided Voluntary Agency Schools.						
(i) Building Grants for classrooms and laboratories	1,500	1,500	1,500	1,500	6,000	The Economic Mission's proposals extend over a period of five years (1960/61 to 1964/65). Provision for 1964/65 will be shown in the next general development plan.
(ii) Furniture and Equipment Grants	240	240	240	240	960	
(iii) Extensions to school hostels	-	2,250	2,250	-	4,500	
(b) Government Maintained Schools.						
(i) New Classrooms	800	800	800	800	3,200	
(ii) Furniture and Equipment	120	120	120	120	480	
(c) House for Education Officer	4,000	-	-	-	4,000	
TOTAL CAPITAL	6,660	4,910	4,910	2,660	19,140	
2. RECURRENT.						
(d) Education Officer	-	1,008	1,056	1,104	3,168	
(e) Travelling and Subsistence-Education Officer	-	320	320	320	960	
TOTAL RECURRENT	-	1,328	1,376	1,424	4,128	
TOTAL ECONOMIC MISSION PROPOSALS	6,660	6,238	6,286	4,084	23,268	
TOTAL GRANT REQUIRED	35,580	40,862	41,591	28,248	146,281.	

EDUCATION.

EXPANSION OF TECHNICAL EDUCATION FOR AFRICANS.

APPLICATION FOR A FREE GRANT OF £58,058.

MBABANE TRADES SCHOOL.

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The Mbabane Trades School was established in 1946. The entire capital costs have been met from C.D. & W. sources. Recurrent costs have been taken over progressively by the Swaziland Administration which is now fully responsible for their payment. The school offers four-year courses in Building, Cabinetmaking and Carpentry, and Motor Mechanics. It can accommodate 72 apprentices, the annual intake being limited to 18. At the beginning of 1960, fifty-seven applications were received for the 18 vacancies. The Trades School is the only institution in the Territory which provides Trade Training. It receives strong support from the Paramount Chief and Native Authority.

2. The Territory is rapidly becoming industrialised, and it is clear that the School must be further expanded to train more Swazis for skilled employment. The present enrolment is 72, 24 in each of the Building, Carpentry and Motor Mechnics courses. The first aim of this scheme is to increase enrolment to 140, of which 48 would be admitted to the Building Section, 32 to the Carpentry Section, 40 to the Motor Mechanics Section (which would be further developed to include welding, fitting and turning) and 20 to a new Tailoring section. The latter proposal is justified since in the absence of a local industry Swazis purchase considerable quantities of clothing from mail order houses in the Union of South Africa. Also, there is a growing demand for school uniforms from the Territory's 34,900 pupils.

The decision to include this new section in the development plan followed an inspection of the highly successful Tailoring Department established at the Lerotholi Technical School in Maseru.

3. These proposals were submitted to the Economic Survey Mission, who judged them to be inadequate and advised:-

(a) that provision should be made for sandwich courses to enable men already engaged in industry to better their qualifications, and improve their skill and their prospects of advancement;

(b) that a technical bias should be given to the curricula of selected secondary schools;

(c) that apprenticeship training should be shared between the Trades School and industry.

4. In response to this advice, the following additions have beenmde to the Scheme:-

(a) Sandwich Courses. It is proposed to offer courses in fitting and turning, general mechanics and machine operating up to a maximum of 15 men per annum. Industrialists who have been consulted welcome the proposal to introduce these short term courses.

(b) Technical Instruction in the High Schools. It is proposed to convert an existing Junior Secondary School into a Junior Technical School. The details were worked out in consultation with experts in the Southern Rhodesian Education Department and with the assistance of experts on the staff of a large Technical College in the

3/.....

Union of South Africa. The aim is to introduce as part of the curriculum at a selected school a number of technical subjects, which would stand the students in good stead when they enter industry. Subjects such as English, Zulu, Mathematics, Physics and Chemistry would remain, but the curriculum would include also Geometrical Drawing, Metalwork, Woodwork and Mechanics.

During the coming development period this curriculum would be introduced at one boys' Secondary School. Funds would be required for workshops, equipment, machinery, staff emoluments and general training costs.

In due course the selected school would develop into a Technical College and so serve the industries now being established in the Territory.

(c) Inspection of Apprenticeship Training.

There is at present no legislation controlling apprenticeship in Swaziland. Such legislation is, however, contemplated, and details are being worked out by a Committee on pre-industrial training which has been appointed to advise on this important matter and keep it constantly under review.

It is proposed to divide apprenticeship training between the Trades School and industry itself and to prescribe certain trade tests based on City & Guilds' requirements. The general control of this training will (as in other territories) be vested in a Board, and it is proposed that provision be made now for the appointment of a full

time Secretary-cum-Inspector of Apprenticeship Training. Control is today exercised by the Labour Officer. The proposed Secretary-cum-Inspector would spend a great deal of his time visiting those industries at which indentured apprentices are completing their artisan training and in dealing with the general question of trade tests, etc. Such an appointment is essential if apprenticeship training is to be placed on a proper footing in Swaziland.

The costs of the proposal are limited to the emoluments, housing and travelling of the officer concerned.

APPENDIX I.

FINANCIAL SUMMARY.

1. Administrative Authority : Swaziland.
2. Allocation : Swaziland.
3. Classification : Education.
4. Description : Extension of Technical Education for Africans.
5. Total Cost. : £27,193 plus £33,198 recommended by the Economic Mission (Total = £60,391).
6. Basis of Administration for Accounting Purposes.

	Capital.	Recurrent.	Total.
Original Scheme.	22,410	2,450	24,860
Proposed by Economic Mission.	20,970	12,228	33,198
TOTAL.	£43,380	£14,678	£58,058

7. Basis of Calculation of Claim : Free Grant.

APPENDIX II.

ESTIMATES OF EXPENDITURE - TECHNICAL TRAINING.

	1960/61	1961/62	1962/63	1963/64	TOTAL
TION I.					
Mbabane Trades School.					
(a) Capital.					
(i) New Hostel.	3,000	3,000	-	-	6,000
(ii) Extensions, Dining Hall & Kitchen.	1,500	3,000	-	-	4,500
(iii) Workshop, etc. - Tailoring Department.	1,600	-	-	-	1,600
(iv) Extensions - Motor Mechanics Dept.	-	1,500	-	-	1,500
(v) Housing for Instructor & Assistant Instructor Tailoring Department.	3,960	-	1,000	-	4,960
(vi) Furniture & Basic Equipment.	800	1,100	400	400	2,700
(vii) 3-ton Lorry.	-	1,150	-	-	1,150
TOTAL CAPITAL	10,860	9,750	1,400	400	22,410
(b) Personal Emoluments.					
(viii) Instructor, Tailoring Department.	250	1,000	1,036	1,072	3,358
(ix) Assistant Instructor Tailoring Dept.	-	-	75	300	375
TOTAL PERSONAL EMOLUMENTS	250	1,000	1,111	1,372	3,733
(c) Other Charges.					
(x) Training Costs - Tailoring Dept.	100	250	350	350	1,050
TOTAL SCHEME.	£11,210	11,000	2,861	2,122	27,193
LOCAL CONTRIBUTION.		312	730	1,291	2,333
C.D. & W. GRANT REQUIRED	£11,210	10,688	2,131	831	24,860

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S W A Z I L A N D

LAND UTILIZATION

RURAL DEVELOPMENT AND SOIL CONSERVATION.

APPLICATION FOR A FREE GRANT OF £89,156.

Grants totalling £103,595 were made from the Territorial allocation of C.D. & W. funds under the 1955 Act (Scheme D. 2582) to continue and expand the programme of Rural Development and Soil Conservation initiated under earlier Acts. As a result of the tapering of C.D. & W. assistance towards recurrent expenditure the Territory is meeting the entire recurrent cost of this scheme in 1959/60. The present application is therefore confined to the new capital items, additional staff, and associated recurrent expenditure required to extend the scope of the existing projects.

2. The Scheme is divided into three sections, Rural Development, Soil Conservation Works and Dam Construction.

Section I: Rural Development.

3. This section covers a variety of activities falling within the term Rural Development. It includes provision for community services such as halls, playing fields, water supplies, etc; the purchase of vehicles and camping equipment required by district staff for rural development

work/...

work (now paid from local revenues), and the construction of cream tracks to promote the establishment of small African dairies.

4. The principal innovation is the creation of a planning team of two Agricultural Officers. There is a growing demand from European farmers for advice in farm planning, but the work involved (investigation, survey, planning and mapping) is beyond the resources of the three existing Agricultural Officers, who between them have to supervise all agricultural extension work in the Territory. Similarly in the Swazi areas the planning of resettlement schemes has been considerably retarded by the fact that the mass of basic information on population, land holdings, crops, livestock, etc. required for planning purposes has to be gathered by Assistant Agricultural Officers and their staffs to the detriment of their normal extension work. In many areas agricultural education is reaching the stage where little more can be accomplished in the way of long-term land use planning until the pattern of settlement is recast on more rational lines than the present scatter of homesteads (and cattle kraals) throughout the best stretches of cultivable land.

5. Up to date aerial photographs are an essential aid to land use planning, both in the European and in the Swazi areas. The existing cover was flown in 1947 (with a defective camera)

and/...

and is of very limited use. It will therefore be necessary to rephotograph large areas of the Territory, beginning in 1961/62.

6. The total cost of Section I over the period 1960/64 is estimated at £38,696.

Section II: Soil Conservation Works.

7. Soil conservation by means of mechanically constructed contour furrows began in a small way in 1949 with the purchase of two tractors. Although additional equipment was provided in 1953, 1956 and 1958 only 85 square miles, mostly in the Ngwavuma catchment area in the south of the Territory, has so far been protected by contour furrows. Gully erosion has not yet developed on a large scale, but its appearance in many areas is an indication of the extent to which the earlier stages of erosion, caused by overgrazing and misuse of land, are at work throughout the Territory. This impoverishment of grass cover, loss of topsoil, deterioration of water supplies, etc. is proceeding even in areas where pressure on land resources cannot be described as acute. The population density of the Swazi areas in 1956 was just over 60 per square mile, and with population increasing at the rate of about 2½% per annum the density will probably rise to 100 per square mile over the next 20 years. These are, of course, overall figures and take no account of the large extent of uncultivable land and the much heavier concentrations of population in the more fertile and well

watered/...

watered areas. It is evident therefore that the present programme of soil conservation must be speeded up considerably. A successful grass stripping campaign, carried out under previous C.D. & W. schemes, is well advanced but, as is obvious from a number of areas, grass stripping by itself is not sufficient to halt erosion, and must be augmented by a carefully planned system of mechanically constructed discharge furrows.

8. It is therefore proposed that the three existing conservation units should be increased to five, by one in 1960/61 and one in 1961/62. Provision is also made for a third new unit in 1962/63 to re-equip the oldest of the existing units. The total cost in equipment, staff (foremen and drivers) and operating expenses is estimated at £76,345.

Section III: Dam Construction.

9. It was stated in the preceding section that the major causes of erosion were misuse of land and over-grazing. The use of the plough, and more recently the tractor, has made it possible for many Swazi to cultivate far more land than they can manage efficiently. While the acreage under cultivation is increasing, yields remain extremely low. At the same time the Swazi have retained their traditional attachment to cattle, and they are also increasing as a result of elaborate disease control measures. Under these conditions the grazing areas are being

subjected/...

subjected to the double pressure of contraction and increasing numbers. While the long term solution lies in achieving a balance between stock rearing and cultivation appropriate to the local ecological pattern, certain areas are already so heavily overstocked that only immediate re-distribution will prevent irreparable damage to the land. Sufficient understocked grazing areas are available to effect the necessary re-distribution if adequate water supplies can be provided. Some dam construction has already been undertaken with plant purchased from C.D. & W. funds, but progress has inevitably been slow with only one dam building unit to cover the whole Territory. It is therefore proposed that a second unit should be provided in 1960/61, and that additional tractors etc. should be acquired in 1962/63 to re-equip the existing unit, which includes plant purchased eleven years ago.

10. Apart from this special work connected with stock re-distribution the equipment will be used to improve water supplies in Swazi areas especially in the lowveld, to construct dams for farmers on a hire basis, and to undertake other earth moving works connected with rural development activities.

11. The total cost of these proposals is £73,269.

Cost/...

Cost of Scheme

12. The total cost of the Scheme will therefore be £188,310 less anticipated revenue of £6,000. It is assumed however, that the Territory will be required to contribute towards the recurrent cost by the tapering method introduced in 1955 Act Schemes. On this basis the Territory will contribute £26,070, thereby reducing the amount of C.D. & W. assistance required to £156,240.

13. Application is therefore made for a grant of £156,240. Sufficient funds are available in the Territorial allocation made under the 1959 C.D. & W. Act.

Economic Survey Mission.

14. The Economic Survey Mission has recommended that the above Scheme should be supplemented by a second planning team under Section I to speed up the work of land use planning. This involves the provision of two additional posts of Agricultural Officer, with the necessary housing, office accommodation, transport, and recurrent expenses. Arising out of the Mission's recommendations is the need to complete the aerial survey of the Territory for which part provision has been made under Section J (Item 6). The additional £7,000 included in the Mission's proposals will make it possible to re-fly the entire Territory by the end of the development period.

15. The/...

15. The total cost of the Mission's recommendations is £32,916, comprising £20,970 on capital and £11,946 on recurrent items. It is proposed that the full amount of £32,916 should be met by a free grant.

16. The total grant required for this Scheme is therefore £189,156. The usual Financial Summary and detailed estimates are attached as Appendices I and II.

APPENDIX I

FINANCIAL SUMMARY

1. Administering Authority	-	Swaziland
2. Allocation	-	Swaziland
3. Classification	-	Land Utilization
4. Description of Scheme	-	Rural Development and Soil Conservation.
5. Total Cost	-	£215,226 (nett)
6. C.D.& W. Assistance required	-	Grant of £189,156 (incl. E.S.M. element of £32,916)

7. Basis of Administration for accounting purposes.

	£	£
Capital		143,955 (incl. £20,970 E.S.M.)
Recurrent		
Personal Emoluments	46,471(£9346 E.S.M.)	
Other Charges	30,800(£2600 E.S.M.)	77,271 (incl. £11,936 E.S.M.)
		221,226
Less Revenue		6,000
		215,226 (incl. £32916. E.S.M.)

8. Basis of calculation of claim where grant does not provide for 100% of cost.

100% of Capital	143,955
Recurrent on sliding scale i.e. 100% in 1960/61, 75% in 1961/62, 50% in 1962/63 and 25% in 1963/64.	33,255
(except for E.S.M. proposals for which 100% assistance required.)	11,946
	189,156

9. Any other accounting instructions - No virements between Sections without prior approval.

APPENDIX II

RURAL DEVELOPMENT, SOIL CONSERVATION AND DAM CONSTRUCTION.

SECTION I. RURAL DEVELOPMENT

	1960/61	1961/62	1962/63	1963/64	Total
CAPITAL:					
1. Quarters for 2 Agricultural Officers (Planning)	8,000				8,000
2. Community Services	1,500	1,500	1,500	1,500	6,000
3. Replacement of Vehicles.	1,470		1,470	1,470	4,410
4. Construction & Maintenance of Cream Tracks and Cream Shelters	400	400	400	400	1,600
5. Camping Equipment		200		200	400
6. Aerial Survey		7,000			7,000
Total Capital:	11,370	9,100	3,370	3,570	27,410
RECURRENT:					
Personal Emoluments.					
7. 2 Agricultural Officers (Planning). Scale L2.	1,896	1,956	2,016	2,082	7,950
8. Gratuities.			736		736
Total Personal Emoluments	1,896	1,956	2,752	2,082	8,686
Other Charges					
9. Travelling Expenses	600	600	600	600	2,400
10. Contingencies.	50	50	50	50	200
Total Other Charges:	650	650	650	650	2,600
Total Recurrent:	2,546	2,606	3,402	2,732	11,286
Total Section I.	£13,916	11,706	6,772	6,302	38,696

Scale L2 = Basic: £666x30-816x36-1,032x42-1,242x48-1,386 plus 33⅓% inducement allowance.

RURAL DEVELOPMENT, SOIL CONSERVATION AND DAM CONSTRUCTION

SECTION II: SOIL CONSERVATION

	1960/61	1961/62	1962/63	1963/64	Total
CAPITAL:					
1. 6 x D4 Caterpillar Tractors	7,380	7,380	7,380		22,140
2. 3 Hydraulic Attachments	420	420	420		1,260
3. 6 Graders	5,760	5,760			11,520
4. 3 Caterpillar 40 Scrapers	1,720	1,720	1,720		5,160
5. 3 Dozer Blades	670	670	670		2,010
6. 3 Water Carts	180	180	180		540
7. 2 Caravans	500	500			1,000
8. 5 x ¾-ton Trucks	770	1,540	770	770	3,850
9. Landrover		735			735
10. 6 Corrugated Iron Huts	60	60	60		180
11. Miscellaneous Equipment	200	100	100	100	500
Total Capital:	17,660	19,065	11,300	870	48,895
RECURRENT:					
Personal Emoluments					
12. 2 Foremen ϕ	1,616	1,616	1,616	1,616	6,464
13. 6 Tractor Drivers	300(2)	636(4)	1,008(6)	1,116	3,060
14. Labour and Rations	480	720	960	960	3,120
15. Gratuities			606		606
Total Personal Emoluments:	2,396	2,972	4,190	3,692	13,250
Other Charges					
16. Running Costs of machinery and vehicles	1,500	3,000	4,500	4,800	13,800
17. Contingencies	100	100	100	100	400
Total Other Charges:	1,600	3,100	4,600	4,900	14,200
Total Recurrent:	3,996	6,072	8,790	8,592	27,450
Total Section II:	£21,656	25,137	20,090	9,462	76,345

ϕ Scale Basic £504x24-576x30-606 plus 33⅓% inducement allowance.

RURAL DEVELOPMENT, SOIL CONSERVATION AND DAM CONSTRUCTION

SECTION III. DAM CONSTRUCTION

		1960/61	1961/62	1962/63	1963/64	Total
	CAPITAL:					
1(a)	2 Caterpillar D4 Tractors	7,380				7,380
(b)	Hydraulic Attachments	840				840
(c)	2 Caterpillar Scrapers	3,440				3,440
(d)	1 Dozer Blade	670				670
2(a)	2 Caterpillar D7 Tractors			14,960		14,960
(b)	Hydraulic Attachments			520		520
(c)	2 Power Control Units			1,210		1,210
(d)	2 Caterpillar 70 Scrapers			6,160		6,160
(e)	1 Dozer Blade			1,080		1,080
3.	3 x ¾-ton Trucks	770	770	770		2,310
4.	2 Caravans	500		500		1,000
5.	6 Corrugated Iron Huts	90		90		180
6.	3 Dumpy Levels with Staves	100		50		150
7.	1 x 7-ton Truck	2,000				2,000
8.	Miscellaneous Equipment	200	100	200	100	600
9.	1 Water Cart	180				180
10.	Water Supplies in Native Area	1,000	1,000	1,000	1,000	4,000
	Total Capital:	17,170	1,870	26,540	1,100	46,680
	RECURRENT:					
	Personal Emoluments					
11.	3 Foremen ♭	1,616	1,616	2,424	2,424	8,080
12.	8 Tractor Drivers	600(4)	672	1,344(8)	1,488	4,104
13.	Labour and Rations	480	480	720	720	2,400
14.	Gratuities			605		605
	Total Personal Emoluments:	2,696	2,768	5,093	4,632	15,189
	Other Charges					
15.	Running Costs of machinery and Vehicles, and Travelling Expenses	1,500	2,000	3,500	4,000	11,000
16.	Contingencies	100	100	100	100	400
	Total Other Charges	1,600	2,100	3,600	4,100	11,400
	Total Recurrent:	4,296	4,868	8,693	8,732	26,589
	Total Section III:	£21,466	6,738	35,233	9,832	73,269

♭ Scale: Basic £504x24-576x30-606 plus 33⅓% inducement allowance.

S U M M A R Y

RURAL DEVELOPMENT, SOIL CONSERVATION AND DAM CONSTRUCTION.

	1960/61	1961/62	1962/63	1963/64	Total
CAPITAL:					
SECTION I.	11,370	9,100	3,370	3,570	27,410
SECTION II.	17,660	19,065	11,300	870	48,895
SECTION III.	17,170	1,870	26,540	1,100	46,680
TOTAL CAPITAL:	46,200	30,035	41,210	5,540	122,985
RECURRENT:					
SECTION I.	2,546	2,606	3,402	2,732	11,286
SECTION II.	3,996	6,072	8,790	8,592	27,450
SECTION III.	4,296	4,868	8,693	8,732	26,589
TOTAL RECURRENT:	10,838	13,546	20,885	20,056	65,325
TOTAL SCHEME:	57,038	43,581	62,095	25,596	188,310
ESTIMATED REVENUE:	800	1,200	2,000	2,000	6,000
NET EXPENDITURE:	56,238	42,381	60,095	23,596	182,310
LOCAL CONTRIBUTIONS:	-	3,086	9,442	13,542	26,070
C.D.&W. ASSISTANCE:	£56,238	39,295	50,653	10,054	156,240

Contributions - Nil 25% 50% 75%

ECONOMIC SURVEY MISSION PROPOSALS

FARM PLANNING.

	1960/61	1961/62	1962/63	1963/64	Total
CAPITAL:					
1. Housing (2 A.Os).	8,000				8,000
2. Office Accommodation H.Q.	4,500				4,500
3. Transport (2 Landrovers)	1,470				1,470
4. Aerial Survey				7,000	7,000
Total Capital	13,970			7,000	20,970
RECURRENT:					
Personal Emoluments					
5. 2 Agricultural Officers, Scale L2.	2,016	2,096	2,176	2,272	8,560
6. Gratuities			786		786
Total Personal Emoluments:	2,016	2,096	2,962	2,272	9,346
Other Charges					
7. Travelling Expenses	600	600	600	600	2,400
8. Contingencies	50	50	50	50	200
Total Other Charges:	650	650	650	650	2,600
Total Recurrent:	2,666	2,746	3,612	2,922	11,946
Total Scheme:	£16,636	2,746	3,612	9,922	32,916

Scale L2 - £666x30-816x36-1,032x42-1,242x48-1,386 plus 33⅓% inducement allowance.

S W A Z I L A N D.

LAND UTILIZATION - AGRICULTURAL EDUCATION AND EXTENSION.

APPLICATION FOR A FREE GRANT OF £92,922.

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Grants totalling £78,863 were made from the Territorial allocation of C.D. & W. funds under the 1955 Act (Scheme D.2583) to continue and expand the agricultural extension work initiated under earlier Acts. As a result of the tapering of C.D. & W. assistance towards recurrent expenditure the Territory is meeting the entire recurrent cost of the Scheme in 1959/60. The present application is therefore confined to the new capital items, additional staff, and associated recurrent expenditure required to extend the scope of the existing services and projects.

2. The Scheme is divided into three sections, Field Services, Land Utilization Officers' Training, and the Experimental Farm, Goedgegun.

Section I: Field Services

3. The construction work for which provision is made in the Schemes dealing with soil conservation and stock redistribution should be regarded as a short term palliative rather than a final solution of the problem of soil erosion. This must lie in the development of sound land use practices, guided by agricultural and veterinary research and demonstrated in the field by extension staff. This section therefore makes provision for the additional staff required to continue the expansion of agricultural extension work in the Swazi areas initiated under the current C.D. & W. Act. This includes the running of demonstration plots in association with the research branch of the Department, the sale of seed, fertiliser, implements and grain storage tanks, assistance in the

disposal of produce, the introduction of rotational grazing, the fostering of Farmers' Associations, the development of irrigation in selected areas, the supervision of soil conservation works, - in short the promotion of improved methods of land utilization by whatever means the Department can employ.

4. There is also a growing demand for assistance from European farmers whose agriculture is becoming more efficient and more specialised by the introduction of new crops (citrus, sugar, etc.) and new methods of cultivation and animal husbandry (irrigation, winter pastures, etc.). This specialised extension work cannot be undertaken by existing staff, who are fully occupied in supervising the normal field work of the Department.

5. The additional staff required therefore consists of four Agricultural Officers, one to specialise in irrigation, the second in cotton and tobacco, the third in citrus and the fourth in pastures. Two Assistant Agricultural Officers will be needed to establish new extension areas and also 40 Land Utilization Officers to staff these areas, to manage demonstration plots to be set up by the research branch, and to reinforce the staffs of existing extension areas. Other items provide the necessary housing, office and storage accommodation, transport and equipment.

6. The cost of these proposals is estimated at £69,132.

Section II. Land Utilization Officers' Training School.

7. The present training school was established with C.D. & W. funds in 1957, and provides a twelve months' course for 16 trainees. The educational standard of applicants is improving annually, and it is proposed to introduce a two-year course for those of Junior Certificate or above. This will necessitate additional

accommodation and equipment, and the appointment of a full time lecturer (Assistant Agricultural Officer) in place of the existing officer who is also farm manager of the Mdutshane Research Station, and whose duties there have in any case increased so considerably with the recent development of the Station that he cannot now devote sufficient time to the training school. The cost of expanding the school is estimated at £9,865. The operating expenses will be borne by local funds. The expansion of the school is also linked with plans for a more systematic approach to community development, as recommended in the Moffett Report. No decision has yet been taken, however, either on the extent or the scope of a community development programme for Swaziland, and it is not proposed to defer the expansion of the school on this account.

Section III: Experimental Farm Goedgegun.

8. The Goedgegun area is ecologically different from Mdutshane, where the main agricultural research station is being developed, and there are also social and economic factors which set it apart from the rest of the European farming community. Funds were therefore provided under the 1955 C.D. & W. Act (Scheme D.2583 Section III) for the establishment of a small experimental farm to study local agricultural problems. At the time, emphasis was placed on tobacco investigations since this was the most important traditional crop, for which co-operative marketing facilities had already been established. It was subsequently decided, however, that a better approach lay in the creation of an experimental and demonstration mixed farming unit.

9. Plans are now well advanced for the establishment of an experimental block where statistically laid out trials

will be conducted on various factors affecting the major crops of the area. As complement to this a further block of land has been laid out as a demonstration farm where results derived from experimental fields will be applied in a practical farming system.

10. This demonstration farm is designed to include intensive management of dairy cattle, pigs and poultry together with sound crop husbandry practices such as crop rotations, cash crops and pasture leys. In this way it is visualised that the local farmers will be able to study and appreciate the expression of research work as applied to a balanced farm incorporating livestock and agriculture.

11. Staff is being provided from local funds, but assistance is required for the purchase of equipment (tractor, truck, spray-race, etc.) and stock (grade dairy cows), and for the recurrent running expenses. The total cost will be £6,100 but revenue from the sale of produce and stock is expected to cover about £4,000 of this.

Cost of Scheme.

12. The total cost of the Scheme will therefore be £85,097, less anticipated revenue of £5,000. It is assumed, however, that the Territory will be required to contribute towards the recurrent cost by the tapering method introduced in 1955 Act Schemes. On this basis the local contribution will be £16,791, leaving £63,306 to be found from C.D. & W. sources. Application is therefore made for a grant of £63,306 from the Territorial allocation under the 1959 Act.

13. Economic Survey Mission.

The Economic Survey Mission has recommended that the above Scheme should be supplemented by two additional officers (1 Agricultural Officer: 1 Assistant

research services for irrigation farming, which has so far received little attention on account of shortage of staff. The cost of these posts together with the necessary capital items and recurrent expenses, is estimated at £29,616. It is proposed that the full amount should be met by a free grant.

13. The total grant required under this Scheme is therefore £92,922. The usual Financial Summary and detailed estimates are attached as Appendices I and II.

APPENDIX I.

FINANCIAL SUMMARY.

1. Administering Authority: Swaziland.

2. Allocation: Swaziland.

3. Classification: Land Utilization.

4. Description of Scheme: Agricultural Education and Extension.

5. Total Cost: £109,713 (nett).

6. C.D. & W. Assistance Required: Grant of £92,922 (including Economic Survey Mission element of £29,816).

7. Basis of Administration for accounting purposes:

	£	£	
Capital		58,780	(including £12,820 E.S.M.)
Recurrent.	£		
Personal Emoluments	42,303	(£10,546 E.S.M.)	
Other Charges	13,630	(£6,250 E.S.M.)	55,933
		114,713	
Less Revenue		5,000	
		109,713	(£29,616 E.S.M.)

8. Basis of Calculation of Claim where grant does not provide for 100% of cost:

100% of Capital	£58,780
Recurrent on sliding scale, i.e. 100% in 1960/61, 75% in 1961/62, 50% in 1962/63 and 25% in 1963/64.	17,346
(except of E.S.M. proposals for which 100% assistance required)	16,796
	£92,922

9. Any other accounting instructions: No viremements between Sections without prior approval.

APPENDIX II.

AGRICULTURAL EDUCATION AND EXTENSION.

SECTION I. FIELD SERVICES.

	1960/61	1961/62	1962/63	1963/64	Total.
CAPITAL.					
1. Quarters for Agricultural Officers and Assistant Agricultural Officers	12,000	4,000	4,000		20,000
2. Replacements and Additional Vehicles	2,205	2,205	2,205	2,205	8,820
3. Replacement of Ferguson Tractors	1,400	1,400	1,400		4,200
4. Office and Field Survey Equipment	600	50	50	50	750
5. Office Accommodation	1,500	500	500	500	3,000
Total Capital:	17,705	8,155	8,155	2,755	36,770
RECURRENT:					
Personal Emoluments.					
6. 3 Agricultural Officers. Scale L2.		888(1)	1,856(2)	2,904(3)	5,648
7. 2 Assistant Agricultural Officers. Scale L5.	808(1)	1,696(2)	1,776	1,856	6,136
8. 34 Land Utilization Officers. Grade I.	2,112(16)	3,192(22)	4,380(28)	5,676(34)	15,360
9. Gratuities			318	680	998
Total Personal Emoluments:	2,920	5,776	8,330	11,116	28,142
Other Charges.					
10. Travelling Expenses	250	730	1,070	1,400	3,450
11. Uniforms for L.U.O's	30	35	45	60	170
12. Publications	100	100	100	100	400
13. Contingencies	50	50	50	50	200
Total Other Charges:	430	915	1,265	1,610	4,220
Total Recurrent:	3,350	6,691	9,595	12,726	32,362
Total Section I:	£21,055	14,846	17,750	15,481	69,132

Scale L2 = £666 x 30 - 816 x 36 - 1,032 x 42 - 1,242 x 48 - 1,386 plus 33⅓% inducement.

Scale L5 = £576 x 30 - 816 x 36 - 888 plus 33⅓% inducement.

Grade I = £132 x 18 - 240 x 24 - 576.

AGRICULTURAL EDUCATION AND EXTENSION.

SECTION II. LAND UTILIZATION OFFICERS' TRAINING CENTRE.

	1960/61	1961/62	1962/63	1963/64	Total.
CAPITAL.					
1. Quarters for Assistant Agricultural Officer (Training)	4,000				4,000
2. Classroom and Office	500				500
3. Storerooms and Laundry	300				300
4. Farm Unit Buildings	100				100
5. Water Reticulation and Boiler	100				100
6. Miscellaneous Equipment and Epidiascope.	300	150			450
Total Capital:	5,300	150			5,450
RECURRENT:					
Personal Emoluments.					
7. 1 Assistant Agricultural Officer (Training). Scale L5.	768	808	848	888	3,312
8. Gratuity			303		303
Total Personal Emoluments:	768	808	1,151	888	3,615
Other Charges.					
9. Travelling Expenses	150	150	150	150	600
10. Contingencies	50	50	50	50	200
Total Other Charges:	200	200	200	200	800
Total Recurrent:	968	1,008	1,351	1,088	4,415
Total Section II:	6,268	1,158	1,351	1,088	9,865

Scale L5 = £576 x 30 - 816 x 36 - 888 plus 33⅓% inducement allowance.

AGRICULTURAL EDUCATION AND EXTENSION.

SECTION III. EXPERIMENTAL STATION GOEDGEGUN.

		1960/61	1961/62	1962/63	1963/64	Total.
	CAPITAL.					
1.	1 Ferguson Tractor	800				800
2.	Grade Dairy Cows	1,500				1,500
3.	Spray Race and Pump	300				300
4.	¾-ton Truck	800				800
5.	Exterior to Implement Shed	150				150
6.	Water Cart	190				190
	Total Capital:	3,740				3,740
	RECURRENT.					
	Other Charges.					
7.	Spares and Repairs	170	60	120	210	560
8.	Fuel and Lubricants	250	250	250	250	1,000
9.	Drugs, Dipping Material and Vaccines	150	150	150	150	600
10.	Contingencies.	50	50	50	50	200
	Total Recurrent:	620	510	570	660	2,360
	Total Section III:	£4,360	510	570	660	6,100

S U M M A R Y.

AGRICULTURAL EDUCATION AND EXTENSION.

	1960/61	1961/62	1962/63	1963/64	Total.
CAPITAL.					
SECTION I	17,705	8,155	8,155	2,755	36,770
SECTION II	5,300	150			5,450
SECTION III	3,740				3,740
TOTAL CAPITAL:	26,745	8,305	8,155	2,755	45,960
RECURRENT.					
SECTION I	3,350	6,691	9,595	12,726	32,362
SECTION II	968	1,008	1,351	1,088	4,415
SECTION III	620	510	570	660	2,360
TOTAL RECURRENT:	4,938	8,209	11,516	14,474	39,137
TOTAL SCHEME:	31,683	16,514	19,671	17,229	85,097
ESTIMATED REVENUE:	1,250	1,250	1,250	1,250	5,000
NET EXPENDITURE:	30,433	15,264	18,421	15,979	80,097
LOCAL CONTRIBUTIONS:	-	1,740	5,133	9,918	16,791
C.D.& W. ASSISTANCE:	£30,433	13,524	13,288	6,061	63,306

Contributions = Nil 25% 50% 75%

ECONOMIC SURVEY MISSION PROPOSALS.

ADDITIONAL FIELD SERVICES (IRRIGATION STUDIES, ETC.)

	1960/61	1961/62	1962/63	1963/64	Total.
CAPITAL:					
1. Housing (1 A.O. and 1 A.A.O.).	8,000				8,000
2. Equipment	3,350				3,350
3. Transport (2 Landrovers)	1,470				1,470
Total Capital:	12,820				12,820
RECURRENT:					
Personal Emoluments.					
4. 1 Agricultural Officer, Scale L2.	1,008	1,048	1,088	1,136	4,280
5. 1 Assistant Agricultural Officer, Scale L5.	848	888	928	968	3,632
6. 2 Recorders, Grade I.	264	300	336	372	1,272
7. 1 Driver, Grade III	132	150	168	186	636
8. Gratuities			726		726
Total Personal Emoluments:	2,252	2,386	3,246	2,662	10,546
Other Charges.					
9. Running Costs, Irrigation Studies, etc.	800	800	800	800	3,200
10. Travelling Expenses	450	550	500	550	2,050
11. Refresher Courses	250	250	250	250	1,000
Total Other Charges:	1,500	1,600	1,550	1,600	6,250
Total Recurrent:	3,752	3,986	4,796	4,262	16,796
Total Scheme:	£16,572	3,986	4,796	4,262	29,616

Scale L2 = £666 x 30 - 816 x 36 - 1,032 x 42 - 1,242 x 48 - 1,386 + 33⅓% inducement.

Scale L5 = £576 x 30 - 816 x 36 - 888 + 33⅓% inducement.

Grade I = £132 x 18 - 240 x 24 - 576.

Grade III = £132 x 18 - 240.

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S W A Z I L A N D.

LAND UTILIZATION - GRAZING AND LIVESTOCK CONTROL.

APPLICATION FOR A FREE GRANT OF £184,236.

Grants totalling £56,472 were made from the Territorial allocation of C.D. & W. funds under the 1955 Act (Scheme D.2584) to continue and expand the programme of grazing control and livestock improvement instituted under previous Acts. As a result of the tapering of C.D. & W. assistance towards recurrent expenditure the Territory is meeting the entire recurrent cost of the Scheme in 1959/60. The present application is therefore confined to the new capital items, additional staff, and associated recurrent expenditure required to extend the scope of the existing projects.

2. The emergence of the Swazi as an agriculturalist has not weakened his traditional attachment to cattle, and livestock control is therefore a vital factor in the development of a balanced system of land utilization. The redistribution of stock from heavily overgrazed areas is dealt with in the scheme providing for dam construction. Adequate water supplies are, however, only the first requirements for the establishment of holding grounds for surplus stock, and provision is now made for the staff, materials and equipment to complete the operation. Redistribution, though important, is however, only one aspect of livestock control, which includes disease control, stock improvement, pasture management and grazing control. Much of this work is being financed from local revenue, but assistance isrequired for the construction of dipping tanks, fencing, rest huts, etc.

3. The cost of these proposals is £25,689. It is assumed, however, that the Territory will be required to contribute towards the recurrent costs by the tapering method

introduced in 1955 Act schemes. On this basis the local contribution will be £2,901, leaving £22,788 to be met from C.D. & W. sources. Application is therefore made for a grant of £22,788 from the Territorial allocation under the 1959 Act.

Economic Survey Mission.

4. The Economic Survey Mission has recommended that the above Scheme should be considerably expanded (a) to provide extension services in the field of animal husbandry, which has received little attention to date, and (b) to increase the number of holding units for stock to be moved from overgrazed areas. This latter project will be closely related to the programme of dam construction for which provision has been made elsewhere. The cost of the Mission's recommendations, which include additional staff, capital expenditure and the recurrent cost of maintaining the holding units, is estimated at £67,456.

5. The Mission has also recommended that the Cattle Research Station at Mpisi, established in 1945 with C.D. & W. assistance, should be expanded. The major item of expenditure is the purchase of approximately 6,700 acres of land and 1,400 head of cattle (£80,000). The remaining expenditure consists of small capital items, staff and operating costs. The total amount required is £93,992.

6. The total cost of the Mission's recommendations is £161,448. It is proposed that the full amount should be met by a free grant.

7. The grant required for this scheme is therefore £184,236. The usual Financial Summary and detailed estimates are attached as Appendices I and II.

APPENDIX I.

FINANCIAL SUMMARY.

1.	Administering Authority	-	Swaziland.
2.	Allocation	-	Swaziland.
3.	Classification	-	Land Utilization.
4.	Description of Scheme	-	Livestock Control.
5.	Total Cost	-	£187,137.
6.	C.D. & W. Assistance Required	-	Grant of £184,236.

7. Basis of Administration for accounting purposes

	£	£
Capital		£128,536 (including £110,170 E.S.M.)
Recurrent	£	
Personal Emoluments	36,931 (31,408 E.S.M.)	
Other Charges	21,670 (19,870 E.S.M.)	58,601
		187,137 (including £161,448 E.S.M.)

8. Basis of Calculation of Claim where grant does not provide for 100% of cost.

	£
100% Capital	128,536
Recurrent on sliding scale, i.e. 100% in 1960/61, 75% in 1961/62, 50% in 1962/63 and 25% in 1963/64 (except Economic Survey Mission proposals for which 100% assistance required)	4,422
	51,278
	184,236

APPENDIX II.

LIVESTOCK CONTROL.

	1960/61	1961/62	1962/63	1963/64	Total.
CAPITAL:					
1. Dipping Tanks in Native Area	1,100	1,100	1,100	1,100	4,400
2. Fencing in Native Area	2,000	2,000	2,000	2,000	8,000
3. Quarters for Farm Manager, Holding Ground	4,000				4,000
4. Rest Huts and Labour Compound	1,000				1,000
5. Transport	966				966
Total Capital:	9,066	3,100	3,100	3,100	18,366
RECURRENT:					
Personal Emoluments.					
6. Farm Manager (Holding Ground). Scale	768	808	848	888	3,312
7. 3 African Supervisors Grade I.	396	450	504	558	1,908
8. Gratuity			303		303
Total Personal Emoluments:	1,164	1,258	1,655	1,446	5,523
Other Charges.					
9. Running Costs and Maintenance.	400	400	400	400	1,600
10. Contingencies	50	50	50	50	200
Total Other Charges:	450	450	450	450	1,800
Total Recurrent:	1,614	1,708	2,105	1,896	7,323
Total Scheme:	10,680	4,808	5,205	4,996	25,689
Local Contributions:	-	427	1,052	1,422	2,901
C.D. & W. Assistance:	10,680	4,381	4,153	3,574	22,788

Scale = £504 x 24 - 576 x 30 - 786 plus 33⅓% inducement allowance.

ECONOMIC SURVEY MISSION PROPOSALS.

ANIMAL HUSBANDRY.

	1960/61	1961/62	1962/63	1963/64	Total.
CAPITAL:					
1. Housing (1 A.O. & 1 A.A.O.)	8,000				8,000
2. Labour Compounds, etc.	3,300				3,300
3. Office Accommodation	600				600
4. Farm Buildings	3,500				3,500
5. Equipment	4,100				4,100
6. Water Supply & Reticulation	1,300	200			1,500
7. Kraals	100	100			200
8. Fencing	1,800	200	100		2,100
9. Transport (2 Landrovers)	1,470				1,470
10. Livestock	1,000	500			1,500
11. Bushclearing	200	100			300
Total Capital:	25,370	1,100	100		26,570
RECURRENT:					
Personal Emoluments.					
12. 1 Agricultural Officer, Scale L2	1,008	1,048	1,088	1,136	4,280
13. 1 Assist. Agric.Officer, Scale L5	848	888	928	968	3,632
14. 2 Recorders, Grade I.	264	300	336	372	1,272
15. 4 African Supervisors, Grade III	528	600	672	744	2,544
16. 1 Driver, Grade III	132	150	168	186	636
17. 45 Cattle Guards (Field Duties).	495	2,542	4,792	6,817	14,646
18. Gratuities			726		726
Total Personal Emoluments:	3,275	5,528	8,710	10,223	27,736
Other Charges.					
19. Running Costs	2,900	2,900	2,900	2,900	11,600
20. Travelling Expenses	350	400	400	400	1,550
Total Other Charges:	3,250	3,300	3,300	3,300	13,150
Total Recurrent:	6,525	8,828	12,010	13,523	40,886
Total Scheme:	£31,895	9,928	12,110	13,523	67,456

Scale L2 = £666 x 30 - 816 x 36 - 1,032 x 42 - 1,242 x 48 - 1,386 + 33⅓% inducement.

Scale L5 = £576 x 30 - 816 x 36 - 888 + 33⅓% inducement.

Grade I = £132 x 18 - 240 x 24 - 576.

Grade III = £132 x 18 - 240.

LAND UTILIZATION DEPARTMENT.

ECONOMIC SURVEY MISSION PROPOSALS.

CATTLE BREEDING EXPERIMENTS (MPISI EXTENSION).

	1960/61.	1961/62.	1962/63.	1963/64.	Total.
CAPITAL:					
1. Purchase of McNabs Farm L.S.B., including ± 1,400 head of cattle	80,000				80,000
2. Labour Compounds	300				300
3. Farm Vehicle (1½-ton L.D.V.).	900				900
4. Fencing (20 miles @ 5 miles p.a.)	350	350	350	350	1,400
5. Water Supplies (10 dams @ £100).	250	250	250	250	1,000
Total Capital:	81,800	600	600	600	83,600
RECURRENT:					
Personal Emoluments.					
6. Assistant Farm Manager	600	600	600	600	2,400
7. 2 African Supervisors, Grade III	264	300	336	372	1,272
Total Personal Emoluments:	864	900	936	972	3,672
Other Charges.					
8. Labour and Rations	1,080	1,080	1,080	1,080	4,320
9. Maintenance and Running Costs including transport.	600	600	600	600	2,400
Total Other Charges:	1,680	1,680	1,680	1,680	6,720
Total Recurrent:	2,544	2,580	2,616	2,652	10,392
Total Scheme:	£84,344	3,180	3,216	3,252	93,992

Note: For revenue see "Summary".

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S W A Z I L A N D.

LAND UTILIZATION - BOTANICAL SURVEY.
APPLICATION FOR A GRANT OF £5,179.

Grants totalling £7,601 were made from the Territorial allocation of C.D. & W. funds under the 1955 Act. (Scheme D.2554) to finance a Botanical Survey of the Territory.

2. Professor R.H.Compton, Emeritus Professor of Botany at the University of Cape Town agreed to undertake the survey, which was begun in January 1956. The work done to date has mainly been the systematic collection and determination of the indigenous phanerogamic and pteridophytic flora of Swaziland. A small building was erected to house the herbarium of reference and to study specimens. The number of sets (i.e. original speciments with duplicates for distribution) collected since the survey began is 4,680. Almost all of these have been identified, and the best material permanently mounted on sheets with full particulars of localities, dates, etc.

3. The herbarium now comprises 4,873 mounted sheets of specimens, representing 696 genera and 1,872 species. A register of collections and a card index have also been compiled: the latter consists of 2,102 cards, each representing a single species known to occur in the Territory. Additions to the herbarium and card index are constantly being made.

4. The observations made in the field together with the herbarium records are laying the foundations for the publication of a Flora of Swaziland, and for

an ecological account, with maps, of the various types of vegetation in this highly diversified Territory: and this is the present aim of the Survey.

5. Professor Compton is prepared to carry on with the survey, and it is therefore proposed to continue the scheme until 31st March, 1964. The total cost will be £7,782. A local contribution to recurrent expenditure has been included. This will amount to £2,603, leaving £5,179 to be found from C.D. & W. sources.

6. Application is therefore made for a grant of £5,179 from the Territorial allocation under the 1959 C.D. & W. Act. The usual Financial Summary and detailed estimates are attached as Appendices I and II.

Appendix I.

FINANCIAL SUMMARY.

1.	Administering Authority	:	Swaziland.
2.	Allocation.	:	Swaziland.
3.	Classification	:	Land Utilization.
4.	Description of Scheme	:	Botanical Survey.
5.	Total Cost	:	£7,782
6.	C.D. & W. Assistance Required	:	£5,179
7.	Basis of Administration for accounting purposes	:	

Capital		£ 900
Recurrent		
Personal Emoluments	5,142	
Other Charges.	1,740	6,882
		£ 7,782

8. Basis of Calculation of claim where grant does not provide for 100% of the cost.

Capital 100%	900
Recurrent on sliding scale i.e. 100% in 1960/61, 75% in 1961/62, 50% in 1962/63 and 25% in 1963/64	4,279
	£ 5,179

Appendix II.

DETAILED ESTIMATES.

	1960/61	1961/62	1962/63	1963/64	Total.
Capital.					
1. Extensions to Herbarium	500[1]	-	-	-	500
2. Equipment.	100	100	100	100	400
	600	100	100	100	900
Recurrent.					
Personal Emoluments.					
3. Botanist (Honorarium)	1,080[2]	1,080	1,080	1,080	4,320
4. Assistant Grade III.	179[2]	197	215	231	822
	1,259	1,277	1,295	1,311	5,142
Other Charges.					
Transport.					
5. Running Costs.	210	210	210	210	840
6. Travelling Allowances.	200	200	200	200	800
7. Materials.	25	25	25	25	100
	435	435	435	435	1,740
Total Recurrent.	1,694	1,712	1,730	1,746	6,882
Total Scheme.	2,294	1,812	1,830	1,846	7,782
Local Contribution to Recurrent Costs.	-	428	865	1,310	2,603
C.D. & W. Assistance Required.	2,294	1,384	965	536	5,179

1. To provide a room of approx. 200 sq.feet and garden extension in front of Herbarium.
2. Honorarium and salary revised as result of Surridge Report on salaries.

S W A Z I L A N D.

LAND UTILIZATION - AGRICULTURAL RESEARCH.
APPLICATION FOR A FREE GRANT OF £117,010.

The inter-relation of agricultural research and field extension work has been stressed in the report of the Economic Survey Mission. Until recently, however, there was virtually no research organisation to provide this balanced approach to agricultural education. In earlier years, before the advent of intensive cultivation in the European areas, the deficiency was partly overcome by drawing on the research experience of Union institutions, but the increasing specialisation in such crops as citrus and sugar has made it essential for Swaziland to develop its own research service. The need for such a service was stressed by several visiting authorities, and as a result grants totalling £74,403 were made from C.D. & W. research funds in 1957 (Scheme R.873) for the establishment of a central research station and two sub-stations.

2. Committees have been formed to draw up both short and long term research programmes for the various stations, the services of an experienced consultant in citriculture have been obtained, and discussions have been held with research workers at a number of Union stations. As a result it has become apparent that if an effective research organisation is to be created, the estimates for Scheme R.873 will have to be further revised, and that the research staff already provided will not be able to institute a satisfactory programme of research until more equipment has been obtained and the stations brought to a more advanced stage of development. It has therefore been necessary to expedite the selection, layout and development of the

stations and district plots, to speed up the recruitment and training of staff, and to make additional capital provision for the equipping of the stations in 1960/61, so that the research staff can be fully employed on productive research work as soon as possible.

3. Further assistance is therefore required for capital items such as housing, station buildings, equipment, transport, water reticulation and irrigation works, fencing and livestock. This is largely a reflection of the increasing acreages of citrus, sugar cane and other crops grown under irrigation, and the need for much more investigational work on irrigation and irrigated crops than was originally envisaged. Funds are required for the continuation of the recurrent element of Scheme R.873 which expires on 31st March, 1960. Here too, a small number of additions, including posts for a Soil Chemist, Clerk, Mechanic, 3 laboratory assistants and 3 recorders, have been found necessary.

4. It is proposed that the scheme should be financed from the Central Research Allocation. The total expenditure over the 4 year period 1960/64 is estimated at £189,999, but this will be slightly reduced by revenue from the sale of station produce (£2,775). In addition local contributions towards capital (10%) and recurrent (sliding scale) costs have been suggested. These will amount to £70,214, leaving £117,010 to be met from C.D.& W. sources.

5. Application is therefore made for a grant of £117,010 from the Central (Research) allocation under the 1959 Act. The usual Financial Summary and detailed estimates are attached as Appendices I and II.

APPENDIX I.

FINANCIAL SUMMARY.

1.	Administering Authority:	Swaziland.
2.	Allocation:	Central (Research).
3.	Classification:	Land Utilization.
4.	Description of Scheme:	Agricultural Research.
5.	Total Cost:	£187,224 (nett).
6.	C.D. & W. Assistance Required:	£117,010.

7. Basis of Administration for accounting purposes:

		£
Capital		63,630.
Recurrent		
Personal Emoluments	65,312	
Other Charges	61,057	126,369
		189,999
Less Revenue		2,775
		187,224

8. Basis of calculation of claim where grant does not provide for 100% of cost.

90% of capital to maximum of	57,267
Recurrent on sliding scale, 80% in 1960/61, 60% in 1961/62, 40% in 1962/63 and 20% in 1963/64	59,743
	117,010

APPENDIX II.

AGRICULTURAL RESEARCH.

	CAPITAL:	1960/61	1961/62	1962/63	1963/64	Total.
1.	Housing	16,290	10,970			27,260
2.	Station Buildings	9,430	550			9,980
3.	Equipment	11,590	3,800	150		15,540
4.	Transport	850				850
5.	Water Reticulation and Irrigation Works	1,550	1,050	900	800	4,300
6.	Fencing and Cattle Grids	1,890	750	300	200	3,140
7.	Electricity	900	800			1,700
8.	Livestock	260				260
9.	Purchase of Highveld Plot	600				600
	Total Capital:	43,360	17,920	1,350	1,000	63,630

	RECURRENT:				
	Personal Emoluments.				
10.	Research Officer in Charge	1,647	1,711	1,775	1,839	6,972
11.	5 Research Officers	5,524	5,748	5,974	6,210	23,456
12.	2 Assist.Agric.Officers	1,630	1,710	1,790	1,870	7,000
13.	Clerk	848	888	928	968	3,632
14.	Mechanic	928	968	1,008	1,048	3,952
15.	Foreman	808	808	808	808	3,232
16.	Analyst. Higher Grade	456	480	504	528	1,968
17.	2 Laboratory Assistants, Grade I.	264	300	336	372	1,272
18.	3 Clerks, 2 x Gde.I; 1 x Gde. II.	432	486	540	594	2,052
19.	8 Recorders, 4 x Gde.I, 4 x Gde. II.	1,140	1,410	1,566	1,722	5,838
20.	Handyman, Grade III	222	240	240	240	942
21.	2 Drivers, Grade III	264	300	336	372	1,272
22.	Gratuities			3,724		3,724
	Total Personal Emoluments:	14,163	15,049	19,529	16,571	65,312
	Other Charges.					
23.	Running Costs of Central Station, 2 Sub-stations and 7 District Experimental Plots	9,655	11,610	12,754	13,178	47,197
24.	Travelling & Subsistence Allowances	2,840	2,840	2,840	2,840	11,360
25.	Overseas Passages			900		900
26.	Contingencies	400	400	400	400	1,600
	Total Other Charges:	12,895	14,850	16,894	16,418	61,057
	Total Recurrent:	27,058	29,899	36,423	32,989	126,369
	Total Scheme:	70,418	47,819	37,773	33,989	189,999
	Estimated Revenue:	225	475	650	1,425	2,775
	Net Expenditure:	70,193	47,344	37,123	32,564	187,224
	Local Contribution (10% of Total Capital)	4,336	1,192	135	100	6,363
	Local Contribution to Recurrent Cost	5,367	11,769	21,464	25,251	63,851
	D. & W.Assistance Required	60,490	33,783	15,524	7,213	117,010

AGRICULTURAL RESEARCH.

BREAKDOWN OF ITEMS.

	1960/61	1961/62	1962/63	1963/64	Total.
1. Housing.					
A. Malkerns.					
(a) Quarters - Chemist	4,000				4,000
(b) Quarters - Clerk	4,000				4,000
(c) Quarters - Mechanic		4,000			4,000
(d) Quarters - A.A.O. (Hort)		4,000			4,000
(e) Quarters - Junior Service	4,500				4,500
(f) Additions to Compound	250				250
B. Big Bend:					
Quarters - Analyst, etc.	1,650	450			2,100
C. District Plots:					
(a) Quarters - Junior Service	1,350	1,800			3,150
(b) 14 Caretakers' Huts @ £90	540	720			1,260
	16,290	10,970			27,260
2. Station Buildings:					
A. Malkerns:					
(a) Addition to Research Block of 1 Laboratory, 3 offices and Kjeldahl room	1,550				1,550
(b) Additional Stores, Garages and Mechanical Workshops	1,400				1,400
(c) Grain, Feeds and Rations Store and Milling/Threshing Room	600				600
(d) Horticultural Operations Building	1,500				1,500
(e) Pasture Research Operations Building	750				750
(f) Meeting/Lecture Room	400				400
(g) Stables and Kraals		300			300
(h) Clinic		250			250
B. Big Bend:					
(a) Implement Shed/ Garage	500				500
(b) Cookhouse and Add. Compound	450				450
(c) Experiment Operations Room	600				600
(d) Fuel Store	220				220
(e) Stores and Workshop	800				800
(f) Fertilizer Store	240				240
C. District Experimental Plots:					
7 Store Huts @ £60	420				420
	9,430	550			9,980

3. Equipment/.....

	1960/61	1961/62	1962/63	1963/64	Total.
Equipment.					
A. Malkerns.					
(a) Pathology Equipment	850				850
(b) Additional Lab. Equipment	700	200			900
(c) Office Equipment	150				150
(d) Lysimeters and Met. Equipment	400	150			550
(e) Irrigation Experiment Equipment	250				250
(f) Tractor, 35 h.p.		800			800
(g) Orchard Sprayer	950				950
(h) Library Books	100		50		150
(i) Implements & Machinery	1,200	700	100		2,000
(j) Welding Plant and Workshop Equipment		450			450
(k) Camping Equipment	200				200
B. Goedgegun.					
(a) Grain Tanks	80				80
(b) Weighbridge	760				760
(c) Motor Scythe		150			150
C. District Experimental Plots					
7 sets Hand Tools & Ox-draught Equipment	420				420
D. Big Bend.					
(a) Office Equipment	200				200
(b) Calculating Machine	190				190
(c) Laboratory Equipment	640	100			740
(d) Library Books	60				60
(e) Lysimeters & Met. Equipment	700				700
(f) Irrigation Experimental Equipment	650				650
(g) 65 h.p. Tractor	1,000				1,000
(h) Cane Trailer	300				300
(i) Laboratory Mill and Access.	450				450
(j) Orchard Sprayer		950			950
(k) Tools	100	50			150
(l) Monkey Winch	70				70
(m) Implements & Machinery	1,020	200			1,220
(n) Miscellaneous Small Research Equipment	150	50			200
	11,590	3,800	150		15,540

Transport:					
¾-ton Truck for Malkerns	850				850
Water Reticulation and Irrigation Works:					
(a) Malkerns	800	800	800	800	3,200
(b) Big Bend	200	200	100		500
(c) Goedgegun	150	50			200
(d) Mhlume	400				400
	1,550	1,050	900	800	4,300
Fencing and Cattle Grids:					
(a) Malkerns	650	550	300	200	1,700
(b) Big Bend	200	200			400
(c) Four District Plots @ £260	1,040				1,040
	1,890	750	300	200	3,140
Electricity.					
(a) Additional 10 k.w. for Malkerns		800			800
(b) 8.5 k.w. for Big Bend	900				900
	900	800			1,700

4/....

	1960/61	1961/62	1962/63	1963/64	Total.
8. Livestock:	260				260
9. Purchase of Highveld Plot:	600				600
Personal Emoluments:					
10. Research Officer in Charge	1,647	1,711	1,775	1,839	6,972
11. Five Research Officers: Scale L.2.					
(a) Horticultural Res Officer	988	1,028	1,068	1,112	4,196
(b) Grain Crop & Cotton. Res. Officer	1,288	1,336	1,386	1,442	5,452
(c) Plant Pathologist	1,184	1,232	1,280	1,328	5,024
(d) Irrigation Research Off.	1,136	1,184	1,232	1,280	4,832
(e) Chemist	928	968	1,008	1,048	3,952
12. Two Assist.Agricultural Officers: Sc. L5.					
(a) A.A.O.Fertility Research	832	872	912	952	3,568
(b) A.A.O.Horticultural Research	798	838	878	918	3,432
13. Clerk, Scale A (Malkerns)	848	888	928	968	3,632
14. Mechanic, Scale L8.	928	968	1,008	1,048	3,952
15. Foreman, Scale £504x24-576x 30-606 basic + inducement.	808	808	808	808	3,232
16. Analyst, Higher Grade (Big Bend)	456	480	504	528	1,968
17. Two Laboratory Assistants, Grade I, Malkerns:					
(a) Analytical	132	150	168	186	636
(b) Nutrition Research	132	150	168	186	636
18. Three African Clerks:					
(a) 1 x Gde.I, Malkerns	150	168	186	204	708
(b) 1 x Gde.II, Malkerns	132	150	168	186	636
(c) 1 x Gde.I, Big Bend	150	168	186	204	708
19. Eight Recorders:					
(a) 2 Malkerns, Fertility & Nutr. 1 x Gde. I	240	264	288	312	1,104
1 x Gde.II.	132	150	168	186	636
(b) 2 Malkerns, Horticulture 1 x Gde. I.	240	264	288	312	1,104
1 x Gde.II.	132	150	168	186	636
(c) 1 Malkerns, Grain Crops and Cotton, Gde. I.	132	150	168	186	636
(d) 2 Big Bend, Irrigation 1 x Gde. I.	132	150	168	186	636
1 x Gde. II.	-	132	150	168	450
(e) 1 Goedgegun, Gde. II.	132	150	168	186	636
20. Handyman, Malkerns, Gde.III.	222	240	240	240	942
21. Two Drivers, Malkerns, Gde. III.	264	300	336	372	1,272
22. Gratuities			3,724		3,724
	14,163	15,049	19,529	16,571	65,312

22. Gratuities			3,724		3,724
	14,163	15,049	19,529	16,571	65,312
23. Running Costs of Central Station, two sub-stations and 7 district experimental plots:					
Labour	4,756	5,845	6,125	6,314	23,040
Rations	1,071	1,287	1,341	1,386	5,085
Spares and Repairs	230	410	760	750	2,150
Fuels and Lubricants	1,858	1,858	1,858	1,858	7,432
Seeds and Fertilizers	800	1,010	1,210	1,410	4,430
Other Station Running Costs	940	1,200	1,460	1,460	5,060
	9,655	11,610	12,754	13,178	47,197

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	1960/61	1961/62	1962/63	1963/64	Total.
4. Travelling and Subsistence Allowances:					
All officers, total of 61,000 miles p.a. @ 10d. per mile	2,540	2,540	2,540	2,540	10,160
Subsistence Allowances	300	300	300	300	1,200
	2,840	2,840	2,840	2,840	11,360

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SWAZILAND.

MEDICAL SERVICES.

EXTENSIONS TO MBABANE GOVERNMENT HOSPITAL
£325,000.

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Accommodation at the Mbabane Hospital at present provides 8 beds for European and 134 for African patients. Accommodation for Europeans is provided in 4 two-bedded wards and for Africans in general male and female wards, children's wards, tuberculosis wards and a maternity ward.

2. The following table gives some idea of the strain imposed on both the Medical Officers and the facilities available at the hospital during 1959:-

	Daily Average No. of In-patients.		Beds.		Average Monthly Total of Out-patients	
	Eur.	Afr.	Eur.	Afr.	Eur.	Afr.
January	6	193	9	142	656	6,665
February	5	184	9	142	551	4,673
March.	4	180	9	142	532	2,118
April	5	190	9	142	650	3,019
May	6	178	9	142	687	2,088
June	6	177	9	142	810	2,160
July	5	173	9	142	578	2,490
August	4	186	9	142	621	2,166
September	6	204	9	142	900	2,672
October	4	203	9	142	877	2,814
November	5	218	9	142	905	2,373
December	5	237	9	142	840	3,678
Average for the year.	5	194	9	142	716	3,076

(The number of beds has been increased from 134 in 1958 by putting additional beds in existing wards).

These figures do not, however, tell the full story, for the overwhelming number of patients in other Government hospitals requiring surgical treatment are sent to Mbabane. In 1958 out of a total of 1,524 operations carried out in Government hospitals, 1,235 were performed in Mbabane, while for 1959 the comparable figures were 1,637 and 1,270 respectively.

3. With their advancement in education and standards of living, the Swazi are gaining increasing faith in medical science and are seeking more and more to share in the benefits which it can confer. That this is so can be seen from the following figures for Mbabane Hospital.

	Daily Average No. of In-patients.		Beds.		Average Monthly Total of Out-patients.	
	Eur.	Afr.	Eur.	Afr.	Eur.	Afr.
1956	5	139	8	110	586	2,057
1957	5	182	8	110	608	2,179
1958	5	192	8	134	677	2,588
1959	5	194	9	142	716	3,076

4. This pressure on hospital facilities will be intensified by the concentrations of African labour created by the various development projects which are in process of establishment throughout the Territory, i.e. forestry, sugar, irrigation, agriculture, coal and iron ore, because, although these projects can be counted on to provide some medical services for their employees, serious cases will still have to be sent to Mbabane Hospital, especially from those projects, such as the Usutu Pulp Company, the Piggs Peak forestry ventures and the Swaziland Iron Ore Development Company which are relatively close to Mbabane.

5. The needs of the European population are no less urgent. In spite of the figures given in the tables above, it would be wrong to assume that 8 beds will be sufficient for the needs of European patients in the next five years. Indeed, in spite of the superficially satisfactory position which exists today, there are already occasions when European patients must necessarily be discharged prematurely to make room for more serious cases, while on other occasions patients in real need of

3/.....

hospitalization must be treated in their homes because of lack of adequate hospital accommodation. That pressure for such accommodation by European patients will increase is self-evident. Not only is the European population as a whole increasing, but St. Mark's School in Mbabane already has an enrolment of 451 pupils which is expected to increase to 580 in 1965: there is no sanatorium at St.Mark's but only a small and primitive sick bay.

6. A clear need therefore exists for the expansion of both African and European hospital facilities. How this can best be provided with the funds likely to be available remains to be decided. The advice of Mr. W. Vetter, World Health Organisation Consultant in Hospital Construction, has been sought and a well-known Johannesburg Architect has been commissioned to prepare designs but these have not yet been received. It is tentatively estimated, however, that the capital cost of the proposed extensions will be in the region of £325,000. A considerable element of this will have to be devoted to out-patients, dispensary, theatre, X-ray, kitchen and boiler house, because the existing facilities are inadequate for present purposes, but the ward space should be increased by approximately seventy beds. The cost of additional staff and other recurrent expenditure will be met from local funds, and has been taken into account in framing the estimates for the Medical Department over the period 1960/64.

7. Detailed plans will be prepared and a C.D. & W. application submitted once the project is approved in principle.

MEDICAL SERVICES.

EXTENSIONS TO PIGGS PEAK GOVERNMENT HOSPITAL £10,000.

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Hospital facilities were established at Piggs Peak in 1958 with the opening of a small 16 bed Cottage Hospital for Africans, built partly with Territorial and partly with C.D. & W. funds (Scheme D.2712). It was designed to deal only with outpatient and comparatively minor in-patient cases, and has no X-ray or operating facilities.

2. The accommodation thus provided has already proved quite inadequate. The hospital is situated between two large forestry concerns and has also to serve considerable areas under African occupation. The daily average number of in-patients is now between 30 and 35. The amount of improvisation which this has entailed, to say nothing of the discomfort caused to patients, needs no emphasis.

3. An additional 14 beds are therefore needed to relieve present congestion. In order to increase the effectiveness of the hospital it is also desirable to add an operating theatre, a small laboratory and an X-ray room for which plant is available.

4. It is proposed that these extensions should be carried out in 1962/63. The cost is estimated at £10,000 as follows:-

Extensions to hospital buildings	£5,800
Extensions to staff quarters	700
Dispenser's house	1,250
Equipment	1,350
Contingencies	900
	£10,000

Capital expenditure would be met from C.D. & W. funds and recurrent costs from the Territorial budget. Detailed plans will be prepared and a C.D. & W. application submitted once the project is approved in principle.

hospitalization must be treated in their homes because of lack of adequate hospital accommodation. That pressure for such accommodation by European patients will increase is self-evident. Not only is the European population as a whole increasing, but St. Mark's School in Mbabane already has an enrolment of 451 pupils which is expected to increase to 580 in 1965: there is no sanatorium at St.Mark's but only a small and primitive sick bay.

6. A clear need therefore exists for the expansion of both African and European hospital facilities. How this can best be provided with the funds likely to be available remains to be decided. The advice of Mr. W. Vetter, World Health Organisation Consultant in Hospital Construction, has been sought and a well-known Johannesburg Architect has been commissioned to prepare designs but these have not yet been received. It is tentatively estimated, however, that the capital cost of the proposed extensions will be in the region of £325,000. A considerable element of this will have to be devoted to out-patients, dispensary, theatre, X-ray, kitchens and boiler house, because the existing facilities are inadequate for present purposes, but the ward space should be increased by approximately seventy beds. The cost of additional staff and other recurrent expenditure will be met from local funds, and has been taken into account in framing the estimates for the Medical Department over the period 1960/64.

7. Detailed plans will be prepared and a C.D. & W. application submitted once the project is approved in principle

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S W A Z I L A N D.

MEDICAL SERVICES.

EXTENSIONS TO RALEIGH FITKIN MEMORIAL HOSPITAL £11,500.

The Raleigh Fitkin Memorial Hospital operated by the Nazarene Mission at Bremersdorp serves the central area of the Territory Because it is a long established large (177 beds) and efficiently run institution the Administration has been spared the expense of building and maintaining a Government hospital in this area in return for an annual subsidy, at present standing at approximately £9,000. The Mission also runs the only training school for African nurses in the Territory.

2. Bremersdorp is centrally situated in relation to much of the economic development in agriculture and mining now taking place This development is exclusively European in origin and is attracting increasing numbers of Europeans to the area. The resulting pressure on European hospital services has imposed a severe strain on the Mission's resources. Present ward space is limited to 8 beds, though the accommodation was designed for only 5 beds, and patients have frequently to be discharged before it is advisable to do so to make room for more serious cases.

3. It is therefore proposed to make a grant to the Mission for the provision of additional European beds. The Mission is considering the erection of a new European block of 10 beds which is estimated to cost £5,000. It has in the past been the practice to assist Missions with building grants on a £ for £ basis, and it is proposed to do so in this case. The cost to Government will therefore be in the region of £2,500, depending on the design and construction finally adopted. In this matter the Mission would be required to submit

plans for the approval of both the Director of Medical Services and the Director of Public Works.

4. The training school for African nurses is, as has been said, the only one in the Territory. It is, moreover, large enough to absorb the additional trainees required by the Territory for several years to come without major expansion Duplication of training facilities at a Government hospital would therefore be both unnecessary and uneconomical. On the other hand the accommodation for probationer nurses is seriously overcrowded. There are at present 48 trainees in accommodation built for a maximum of 30. Kitchen and dining accommodation is naturally as overcrowded.

5. It is estimated that it will cost £9,000 to provide adequate dormitory, ablution, dining and kitchen accommodation for 80 trainees, which is about the most the hospital can cope with efficiently. In view of the importance of the training school for the Territory it is considered that Government should bear the entire cost of the expansion. The recurrent expenditure arising from this would continue to be the responsibility of the Mission, with the assistance of a Government subsidy.

6. An application for a C.D. & W. grant of £11,500 will therefore be submitted when the two projects are approved in principle.

SWAZILAND.

MEDICAL SERVICES.

PROVISION OF ADDITIONAL CLINICS.

APPLICATION FOR A C.D. & W. GRANT OF £12,000.

The policy of the Medical Department is to centralise hospital services at a few points and progressively to increase the size of established hospitals at those points rather than to build a number of small hospitals at other centres. To implement this policy it is clearly necessary to provide clinics in outlying areas where serious cases can be collected for conveyance to hospital by ambulance and where minor cases can receive appropriate treatment.

2. There are at present 23 established clinics, of which 7 are operated by Government, 3 by the Swazi Authority and 13 by Missions. In almost all cases the clinics are staffed by resident nurses, mostly African, and are visited at either fortnightly or monthly intervals by a doctor from the parent hospital. The three clinics operated by the Swazi Authority were built under a Colonial Development and Welfare Scheme (D.1505) but are staffed and run entirely at the expense of the Swazi National Treasury. The mission clinics are subsidized by Government but in no case to the full extent of actual costs. In present conditions, however, the missions cannot afford to build and operate further clinics and the cost of these must be found from other sources.

3. The average monthly attendance at the clinics varies from as much as 800 to as little as 60. The over-all average however is about 300

attendances a month.

4. As the following table shows the clinics have not always been sited to best advantage and while some areas are well served, others are in urgent need of additional clinics.

District.	African population.	Number of Clinics. Government.	Mission.	Swazi Authority.	Total
Piggs Peak.	25,400	1	3	1	5
Mbabane.	27,300	1	1	-	2
Manzini.	43,100	1	4	-	5
Stegi.	23,700	-	4	1	5
Hlatikulu.	77,600	4	1	1	6
Mankaiana.	32,600	-	-	-	-
Total	229,700	7	13	3	23

5. For financial reasons it will not be possible to provide more than one clinic a year over the period 1960/64. A suitable design, incorporating living quarters for an African nurse, has been drawn up. The cost of each clinic is estimated at £2,750, to which should be added £250 for equipment and furniture. The annual capital cost will therefore be £3,000, or £12,000 in all for the four year period, and it is proposed that this sum should come from C.D. & W. sources. Recurrent costs will be met by the Swazi Authority.

6. Application is therefore made for a grant of £12,000 from the Territorial allocation under the 1959 C.D. & W. Act. The usual Financial Summary and detailed estimates are attached as Appendix I.

Appendix I.

Financial Summary.

1.	Administering Authority	: Swaziland.
2.	Allocation.	: Swaziland.
3.	Classification	: Medical Services.
4.	Description of Scheme.	: Construction of Clinics.
5.	Total Cost	: £12,000
6.	C.D. & W. Assistance Required	: £12,000.
7.	Basis of Administration for accounting purposes	

	£
Capital	12,000

Detailed Estimates.

Capital.	1960/61.	1961/62.	1962/63.	1963/64.	Total.
1. Clinic	2,750	2,750	2,750	2,750	11,000
2. Equipment.	250	250	250	250	1,000
Total	3,000	3,000	3,000	3,000	12,000

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SWAZILAND.

MEDICAL SERVICES.

TUBERCULOSIS CONTROL.

APPLICATION FOR A C.D. & W. GRANT OF £40,150.

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Until recently malaria constituted the greatest danger to public health in Swaziland. It has now been virtually eliminated, however, as the result of a vigorous campaign, financed largely by funds allocated under successive C.D. & W. Acts. Tuberculosis has now become the most serious health problem and unhappily its incidence is increasing steadily. In 1952, 304 persons suffering from pulmonary tuberculosis presented themselves for treatment at the Government and mission hospitals. By 1959 this number had increased to 700 and a further 315 patients were treated for tuberculosis of other kinds. Of the 1959 total, no less than 639 were treated as in-patients.

2. Swaziland's hospital accommodation is totally inadequate for its needs. This is particularly true in the case of the specialized accommodation needed for the treatment of tuberculosis, which comprises no more than 93 beds in all at two Government and two mission hospitals. With the limited facilities at their disposal, the medical authorities find it quite impossible to accommodate all tuberculosis patients in need of hospital treatment, or to detain for a sufficient period those who are admitted. In these circumstances there has been no alternative but to concentrate on out-patient treatment, using PAS and INAH as therapeutic agents. As was to be expected, however, this expedient has met with limited success, for primitive people are seldom prepared to travel long distances to hospital to

receive medical treatment, which many still view with suspicion. Those who do as often as not prematurely abandon the prescribed treatment at the least sign of improvement in their health.

3. The position is aggravated by the fact that most of those who do present themselves for treatment already have tuberculosis in an advanced form, with the result that most of the limited hospital space which is available is occupied by persons who are either incurable, or at best are doomed to end up as pulmonary cripples. The tuberculosis problem can therefore never be overcome until it is possible to ensure that the disease is diagnosed and treated at an early stage.

4. In order to assist in determining the full extent of the tuberculosis problem, the World Health Organisation's Tuberculosis Team was invited to Swaziland and spent five months in the Territory in late 1956 and early 1957. The most significant finding of the Team's report was that between 0.6% and 1.6% of the Swazi, namely between 1,360 and 3,680 persons, are secreting acid-fast bacilli in their sputum and are "open" cases of tuberculosis. It is almost certain that a much larger number of persons are suffering from tuberculosis in some less virulent form.

5. The Team was followed by Dr. A. Geyser, the World Health Organisation's Tuberculosis Consultant, who came to Swaziland to make recommendations as to how the problem had best be tackled. Dr.Geyser quickly realised that the expense of attempting to provide hospital accommodation for all tuberculosis cases would be prohibitive, and that the problem

could only be overcome by instituting a domiciliary treatment scheme of some sort.

6. Dr. Geyser's recommendation was that a case-finding tour of the whole Territory should be conducted by a team comprising a Medical Officer, an X-ray Technician, a Laboratory Technician and a Public Health Nurse. In terms of Dr. Geyser's recommendation all the foregoing were to be recruited and paid by the World Health Organisation which was also to be responsible for equipping them with a mobile X-ray unit and a mobile laboratory. Auxiliary staff such as clerks, drivers, laboratory and X-ray assistants were to be recruited and paid by the Swaziland Government.

7. The proposed technique involved the tuberculin testing of the African population, non-reactors being given BCG vaccine and positive reactors being X-rayed. Those with pathological findings on X-ray were to be sputum-tested and treated in their homes for 12 months with INAH under the supervision of health visitors. Drugs were to have been supplied by UNICEF.

8. Following certain objections by the Medical Adviser to the Secretary of State for the Colonies, Dr. Geyser's proposals have now been modified to the extent that INAH will be used together with PAS on all positive cases of tuberculosis whereas the use of INAH alone will be confined to suspects without bacteriological confirmation. Under the revised proposals, UNICEF will continue to meet the cost of the INAH tablets but not the PAS tablets, which it is proposed to include in the C.D. & W. element of the Scheme.

9. The Chamber of Mines, Johannesburg, has agreed to contribute £25,000 towards the cost of the scheme spread over five years. The total cost of the project is estimated at £135,360 and, if hopes are realized, £75,210 will come from WHO and UNICEF sources, £20,000 (for 4 years) from the Chamber of Mines and £40,150 by way of a C.D. & W. grant.

10. Application is therefore made for a grant of £40,150 from the Territorial allocation under the 1959 C.D. & W. Act. The usual Financial Summary and detailed estimates are attached as Appendices I and II.

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	1960/61	1961/62	1962/63	1963/64	TOTAL
PROPOSALS BY ECONOMIC MISSION.					
SECTION II.					
Further Expansion of Mbabane Trades School Sandwich Courses.					
(a) Capital.					
(i) Further enlargement of Hostel.	750	750	-	-	1,500
(ii) Further enlargement of Dining Hall & Kitchen.	-	500	-	-	500
(iii) Further extensions of Motor Mechnics Dept. for fitting and turning.	-	1,000	-	-	1,000
(iv) Housing for Additional Instructor.	-	3,960	-	-	3,960
(v) Additional Furniture & Equipment.	-	400	300	100	800
TOTAL CAPITAL.	750	6,610	300	100	7,760
(b) Personal Emoluments.					
(vi) Instructor - Sandwich Course.	-	250	1,000	1,036	2,286
(c) Other Charges.					
(vii) Travelling - Instructor, Sandwich Courses.	-	50	150	150	350
(viii) Training Costs - Sandwich Courses.	-	50	300	400	750
TOTAL SECTION II.	750	6,960	1,750	1,686	11,146

SECTION III/.....

	1960/61	1961/63	1962/63	1963/64	TOTAL
POSALS BY ECONOMIC MISSION.					
TION III.					
roduction of Technical Training Secondary School Level.					
) Capital.					
(i) Building grants.	3,500	3,500	-	-	7,000
(ii) Equipment & Machinery Grants.	250	800	100	100	1,250
TOTAL CAPITAL	3,750	4,300	100	100	8,250
) Personal Emoluments.					
(iii) Salary grants - Instructors.	210	840	1,060	1,720	3,830
) Other Charges.					
(iv) Training Costs.	50	350	480	560	1,440
TOTAL SECTION III	4,010	5,490	1,640	2,380	13,520
POSALS BY ECONOMIC MISSION.					
ction IV.					
ntrol of Apprenticeship Training.					
) Capital.					
(i) House.	-	3,960	-	-	3,960
(ii) Office accommodation.	-	1,000	-	-	1,000
TOTAL CAPITAL.	-	4,960	-	-	£4,960

	1960/61	1961/62	1962/63	1963/64	TOTAL
OPOSALS BY ECONOMIC MISSION.					
CTION IV (Continued)					
e) Personal Emoluments.					
Secretary to Apprentice Board-cum-Inspector of Apprenticeship Training.	-	300	1,212	1,260	2,772
c) Other Charges.					
Travelling Expenses.	-	-	400	400	800
TOTAL SECTION IV	-	5,260	1,612	1,660	8,532
TOTAL OF SECTIONS II, II & IV (ECONOMIC MISSION'S PROPOSALS)	4,760	17,710	5,002	5,726	33,198
TAL OF SECTION I (C.D. & W. SCHEME AS ORIGINALLY DRAFTED).	11,210	10,638	2,131	831	24,860
TOTAL GRANT REQUIRED.	£ 15,970	28,398	7,133	6,557	58,058

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S W A Z I L A N D

TELECOMMUNICATIONS.
1960/64.

The following are details of the telecommunications programme proposed for 1960/64:-

1960/61

a) Installation of 12 carrier channel between Mbabane and Johannesburg. The Union have approved plans to reconstruct their network up to similar standard as far as the Swaziland border. — 9,000

b) Reconstruction of Mahlanya/Mankaiana route to J.2 standard. This will provide a J.2 route for the proposed Mbabane/Piet Retief carrier. — 8,000

c) Installation of 2 additional switchboard positions at Mbabane and Bremersdorp. The additional lines to Johannesburg will require more switchboard accommodation. — 4,000

d) Cable laying in ductways at Mbabane. — 20,000
At present telephone cables at Mbabane are buried in earth trench and are subject to all kinds of hazards. It is proposed therefore to provide cable ductways to facilitate repair and expansion of the service when required.

e) Cable laying in duct ways at Bremersdorp. — 15,000
Remarks at (d) apply

f) Mbabane and Bremersdorp Auto-exchanges — 25,500

g) Usutu Pulp Company connexions — 19,000

100,500

h) Transport/...

		£100,500
h)	Transport, tools and equipment	8,400
i)	New connexions	6,900
j)	Contingencies	600
		£116,400

1961/62.

k)	Establishment of a three channel link between Bremersdorp and Hlatikulu. This will form part of the trunk route from Bremersdorp to the Transvaal and will relieve Mbabane/Transvaal line which is at present overloaded.	£ 6,600
l)	Reconstruction of Bremersdorp/Stegi route to J.2 standard and installation of 3/10 channel carrier. This will serve the sugar and rice areas and facilitate traffic to Transvaal.	15,500
m)	Reconstruction of Hlatikulu/Goedgegun route to J.2 standard with 3/10 channel carrier.	9,600
n)	Reconstruction of Goedgegun/Mahamba route and installation of 3/10 channel carrier to Piet Retief. m) and n) will complete the high grade link Bremersdorp/Piet Retief.	8,450
o)	Reconstruction of Mbabane/Bremersdorp route to J.2 standard with 12/12 channel carrier. This is essential as the route carries the main trunk to all points in the south of the Territory.	22,400
p)	New connexions	10,000
q)	Contingencies	600
		£73,150

1962/63./...

1962/63.

r)	Provision of two additional physical circuits Goedgegun/Mhlotsheni and Goedgegun/Hluti. These will serve hitherto neglected farming areas.	8,100
s)	Provision of additional trunk Bremersdorp/ Mpisi. This would serve the farms at Mpisi.	3,000
t)	Installation of 3/10 channel carrier between Hlatikulu and Nsoko. This will provide Hlatikulu with an outlet to Natal and also serve the sugar producing area at Big Bend.	9,800
u)	Installation of 3/10 channel carrier between Malkerns and Bremersdorp. This will serve the farming area at Malkerns.	6,600
v)	Provision of 3 additional telegraph channels Mbabane/Johannesburg. It is proposed to centralize all telegraph transmission at Mbabane. This will require three further V.F. telegraph channels with teleprinter machines.	3,350
w)	Establishment of main switching centre at Nsoko. This will complete scheme (t).	15,000
x)	New connexions	10,000
y)	Contingencies	600
		£56,450

1963/64.

z)	Reconstruction of Usutu Forests/Mbabane route	1,400
aa)	New connexions	10,000
bb)	Contingencies	600
		£12,000

The/...

The phasing of the programme is as follows:-

	1960/61	1961/62	1962/63	1963/64	Total
Rehabilitation	68,500	62,550	42,500	1,400	174,950
Outlets to Union	13,000	-	3,350	-	16,350
New Connexions	25,900	10,000	10,000	10,000	55,900
Transport etc.	8,400	-	-	-	8,400
Contingencies	600	600	600	600	2,400
	116,400	73,150	56,450	12,000	258,000